Social justice and equity are key elements to my teaching philosophy and pedagogical approach, and, in taking this approach in the classroom, I endeavor to construct a learning environment that is both challenging and fun, where students have the opportunity to explore multiple perspectives on a similar topic. Students in my courses are encouraged to leverage their prior knowledge, successes, and failures to think critically and creatively about how technology shapes our lives while we shape technology around us through our use and understanding of it. In my teaching practice, I emphasize an interdisciplinary approach focused on critical thinking, academic writing, and building the computational skills necessary for students to succeed in both their creative and entrepreneurial endeavors. My classrooms are always abuzz with activity. I encourage students to learn through a mix of discussion and hands-on approaches because I believe that student and instructor experiences collectively construct a classroom environment and that sometimes doing is the best way to experience phenomena.

### Teaching Experience in the Classroom

I have taught courses at both the introductory and advanced levels in information science. I served as the instructor of record in two courses with an average of 24 students, a TA in 7 courses with an average of 120 students, and a sole grader in 3 courses with an average of 40 students. My experience in classroom types and sizes is as diverse as my experience in the classroom. I have taught introductory major courses, specialized upper-division courses, as well as mandatory upper-division courses for multiple majors (e.g., information science, communication, and computer science). I have taught courses with a wide range of class sizes, including large courses with 100 or more students, medium-sized courses with 35-50 students, and small, 25-student courses. I have also taught across multiple modalities: teaching in-person lectures and labs, hybrid in-person/remote courses, and completely online courses both synchronously and asynchronously. Across my courses, I have received an overall teaching evaluation score of 4.7 out of 5 and as an instructor of record I have an overall teaching evaluation score of 4.89 out of 5. Finally, on multiple occasions I have stepped in as a last-moment substitute lecturer in upper-division courses, demonstrating my ability to come into a classroom on short notice and adapt to the current lesson and classroom structure.

Teaching in multiple contexts has allowed me to see where potential blindspots may emerge in how we teach and to whom. For example, SQL querying is a necessary part of one of the projects taught in INFO 1111: Understanding the World Through Data which the mostly non-major, first-year students found challenging as the syntax of SQL was unfamiliar. It was unfamiliar to me as well, resulting in a live teaching experience where none of my example queries would work – very embarrassing! The rest of the teaching team was comprised of folks with far stronger backgrounds in SQL than myself, and their explanations were not helping students understand why their queries weren't working. After that lesson, I created a worksheet to help students – and myself – through the use of pseudocode and trial and error, understand the function of various SQL syntaxes necessary to complete the project. This worksheet, produced from my early struggles with SQL, is now a standard part of the class, and students find it a helpful and useful tool to broaden their understanding.

# Pedagogical Development

Beyond my experience in the classroom, I have developed my pedagogy through formal training at CU Boulder. At CU Boulder, I completed the Inclusive and Engaged Pedagogy Workshop Series and also served as an ambassador for this program. I attended lectures on Queer, Antiracist, and Decolonial pedagogical perspectives, as well as workshops on collaborative learning, universal design for learning, and how to

use storytelling to create a sense of belonging in the classroom for all students. I put these lessons into practice by modifying the design of an upper-division course at CU Boulder, Online Communities, shifting to a discussion and activity-driven approach. I ensured that the class structure better balanced the time demands of students in their final semester by restructuring the course to allow for alternative and independent assessment, creating more inclusive ways for students to complete the course through independent or group projects. Students gained the freedom to explore topics that interested them through personal reflection, small- and large-group discussions, and a personal reflection assignment designed to introduce students to each other and each other's interests, by documenting their communities online in creative ways aimed at drawing out the fun embedded into researching ourselves and our communities.

### Course Development

During my time at Syracuse University, I collaboratively developed both an undergraduate-level special topics course and a master's level methods course. Social justice and equity are key elements of my teaching goals, as evidenced by my course development. For example, I collaborated with my colleague, Dipto Das, and Dr. John Jordan to develop an undergraduate course on digital platforms. This course emphasized the interconnectedness and diverse ontologies of digital platforms in research; drawing from business, management, information science, data science, computer science, and human-computer interaction. Collaboratively developing this course pushed me to think about how students prioritize information, and how to structure a social justice and equity-oriented course at the undergraduate level. Additionally, I worked with Dr. Carsten Østerlund to develop a graduate-level course on field methods. Through this course design mentorship, I adjusted from course development for undergraduates to consider the needs and abilities of graduate students. Here, I focused on how to best introduce the variety of methods that fall under the broad category of "field methods," developing several drafts of a syllabus and reading list. This iterative process broadened my perspectives and how to build from an existing base to expand knowledge at a graduate level.

I am interested in developing courses that draw on my background in information science and HCI, which might focus on combining qualitative and quantitative approaches to understanding the world around us. For example, I envision a project-based class on exploring digital platforms, where interdisciplinary teams of students work together to explore the nature of community, commerce, and politics across these platforms through human and data-driven inquiry. I am also interested in expanding courses I developed at Syracuse University, building out trace ethnographic methods from a computer science perspective. Students would conduct data interviews, and explore how trace data of individuals is embodied in various contexts, while critically assessing how this data is created and understood by software developers and platform designers.

#### Student Mentoring

In addition to teaching in a variety of formats, I have also spent time working with undergraduate students to develop critical research skills. In my mentoring, I emphasize that there is no one correct approach to answering questions, as everyone's unique experiences and life histories can provide important insights that are valuable to building a collective understanding and collaborative response to phenomena. In information science, students come to the table with a vast array of skills and epistemological commitments that shape how they approach problems. Through discussion, illustration, mind-mapping, and creative individual and group projects, I push students to find balance, encouraging mixed-methods research

based on resilience, problem-solving, and collaborative, critical thinking that will help them achieve their professional goals.

This has translated into strong mentoring relationships with several students. At Syracuse University, I worked with Louisa Williams (current Ph.D. Student at Michigan) in developing her skills as a researcher, learning thematic content analysis and grounded theory approaches on Reddit Data; as well as navigating the hidden curriculum of getting into a Ph.D. program as a first-generation college student. I also worked with Andrew Hamann (current Ph.D. Student at UC Irvine) in doing interview analysis, taking his computer science skills to a more qualitative and design-oriented analytical approach through learning thematic analysis and applying existing theory to qualitative data. Having published papers with Louisa and Andrew, I am beyond pleased to see them blossom as they pursue graduate degrees and take their research ideas to new levels. I am excited to continue to grow in my capacity as a mentor to students and colleagues as an academic advisor or through encouraging student-driven research. I want to use my capacity as a mentor and educator to uplift student interests and encourage their academic exploration and curiosity.

This document includes comprehensive evaluation survey reports and selected qualitative student feedback reports from:

- Undergraduate courses for which I was the primary instructor at the University of Colorado
  - o INFO 3502 Online Communities (2 semesters, upper division)
  - INFO 1111 Introduction to Information Science: Understanding the World Through Data (1 Semester, introductory class)
- Undergraduate courses for which I served as a TA at the University of Colorado
  - INFO 1111 Introduction to Information Science: Understanding the World Through Data (2 Semesters, TA Lead, 2 Studio Sections)
  - o INFO 1121 Designing Interactions (1 Semester, 1 Studio Section)

Course details, enrollment information, and evaluation scores are summarized in the table below:

Term	Course	Role	Modality	Total Students	Response Rate	Course Score	Instructor Score
Spring 2024	INFO 3502 - Online Communities	Instructor of Record	In Person	23	39% (9)	4.5/5 (SD: 0.9)	4.48/5 (SD: 1.05)
Spring 2023	INFO 3502 - Online Communities	Instructor of Record	In Person	24	32% (8)	4.89/5	4.89/5
Summer 2022	INFO 1111 - Understanding the World Through Data	Instrucor of Record	Remote	18	11% (2)	not released, low response	not released, low response
Fall 2023	INFO 1111 - Understanding the World Through Data	Lead TA, led 1 studio section	In Person	38	42.11% (16)	4.59/5	4.59/6
Fall 2022	INFO 1111 - Understanding the World Through Data	Lead TA, led 1 studio section	In Person	29	37.83% (11)	4.61/5	4.6/5
Spring 2022	INFO 1121 - Designing Interactions	TA, led 1 studio section	In Person	40	27.5% (11)	4.55/5	4.6/5
Fall 2021	INFO 1111 - Understanding the World Through Data	TA , led 1 studio section	Hybrid	38	42.11% (16)	4.62/5	4.6/5

#### Table Notes:

- Starting in AY 2020-21, the University of Colorado implemented a new course evaluation form with two key changes: (1) instead of a single question about course quality and instructor quality, each was evaluated with a separate set of eight questions, which I have averaged into a single score for course and instructor.
- I do not have evaluations from the Summer '22 course for which I was the instructor of record, INFO 1111 Understanding the World Through Data, because the response rate was not high enough to report the results.
- I presented the standard deviation of my course and instructor scores for my Spring 2024 Online Communities course as I had one student who entered purposefully low scores and stated as such in their qualitative evaluation. I believe in transparency, which is why I am including their scores in the average, but note that many women, queer people, and people of color teaching in male-dominated fields often experience such negative feedback from students who do not respect their expertise or authority.

#### **Selected Qualitative Student Feedback:**

As an Instructor of Record:

• "Ellen was a great teacher, she was funny, interesting, and quite entertaining. I would take a class with her again."

- "The great instructor really understood the students and was flexible. Class had a lot of material!"
- "Ellen is a fantastic person who always has so much energy. She connects all the content back to real world stuff that's going on. She is really engaging, which makes you almost want to keep talking with her about the subject."
- "Ellen did a great job with this class. She created a great classroom environment/dynamic and made the class well-balanced in terms of difficulty/workload and challenge/learning. Good vibes all around."
- "Ellen made staying on campus until 6pm not unbearable, actually enjoyable. She facilitates the most welcoming environment and builds connections with all her students. Thank you Ellen for another great course, I can't wait to have you again in the future!"

# As a Teaching Assistant and Studio Lead:

- "I enjoyed this class and felt comfortable as an international first-year student. In addition to
  giving me some good experience working with groups, it taught me new ways to use old
  technology that I had used in the past and new technology as well." INFO1111 Fall '22
- "Ellen is a great instructor. She very easily explains the necessary rubric and expectations she has for assignments, and is always willing to answer questions and facilitate discussion between students as well as between her and students to help aid the class' understanding of course content. Ellen is easily reachable and puts a lot of emphasis on empathizing with her students and making sure they understand and are proud of their work. Absolutely no complaints; I've never had a TA who actually cared so much about their students, which I think is honestly really crucial to learning." INFO 1111 Fall '22
- "Fantastic TA. She was understanding, enthusiastic, funny, and all around a great teacher. Ellen provided great feedback, both good and bad. She recognized good work and made sure that I knew it was good. Ellen discussed interesting design topics and encouraged out of the box thinking that was applicable to students daily lives. She is a great public speaker and I wish her the best in the future. Thank you for a great semester, Ellen!" INFO 1121 Spring '22
- "Ellen was great. When there was trouble with something she didn't know, she always took it upon herself to find the answers that we needed and she was a great support system. Sometimes studio would be confusing, but this was not a result of Ellen's capabilities, rather some structural errors done that effected the entire class. When things went awry, Ellen was always flexible and did her very best to support the needs of all of her students. Excellent TA." INFO 1111 Fall '21