INLS 818: Seminar in Human Computer Interaction

This seminar will address research and development issues related to the design and evaluation of user interfaces that incorporate artificial intelligence (AI). The seminar will investigate the nature of human-AI interactivity through a critical lens and explore a diverse set of applications that integrate AI. Students will read and discuss cutting-edge research papers, stay up-to-date with the latest AI news, and work in teams to develop and evaluate an interface prototype or conduct a usability study of an existing interface.

- Instructor: William Payne (william.payne@unc.edu)
- Meeting: Thursdays at 11:00–1:45pm, Manning 303
- Walk-in Open Lab: Wednesdays at 2:30–3:30pm, Manning 213a
- Office hours: Monday–Thursday, Manning 022 (sign up using the link in Canvas)

Course Overview

**Goals**

My goals for this course are that you:

- understand important considerations when designing and/or evaluating a human/AI interaction.
- adapt prior interface design/development skill to interfaces that include AI.
- can identify affordances and constraints of a human/AI interaction and predict ethical implications.
- become fluent reading and discussing the main components and contributions of an HCI research paper.
- stay up-to-date with AI news and incorporate rapid changes in technology and public opinion into your objectives as a designer/developer/scholar.

**Materials**

The "textbook" for this course is:

- Shneiderman, B., *Human-Centered AI*, Oxford University Press (2022)

Students may purchase the book, access a digital version through UNC Libraries, or download a PDF included in Canvas.
All other readings are online and will be linked through Canvas. Some readings come from the New York Times - Students are encouraged to take advantage of UNC's Academic Pass to receive free access.

**Assignments and Evaluation**

Participation: 30%

- Reading Comments: 10%
- In-Class Discussion: 20%

Individual Assignments: 20%

- Hugging Face: 10%
- AI News of the Week: 10%

Final Project: 50%

- Deliverable 1 (Project Idea): 10%
- Deliverable 2 (Design/Test Plan): 15%
- Deliverable 3 (Presentation): 25%

**Stance on High-Pass/Pass/Low-Pass/Fail**

For SILS MS students, classes are P/F, but there are also HP and LP. I am new to this system and find it a bit perplexing. Each professor treats this policy differently. My policy is that HP is equivalent to A+ (>=98%).

I hope I will not be in the position of needing to give a student a Low Pass or Fail grade. If you are in danger of receiving one of these grades, I will do my best to communicate ahead of time.

**Course Topics**

This is one of many Human-Centered AI courses that are being rapidly developed and taught around the world. One can scroll through a few syllabi and see little overlap in the list of readings. Because this course is situated within an iSchool -- as opposed to a Computer Science or Data Science program -- more emphasis will be on human rather than AI. My intent is for students to gain a strong knowledge foundation through the course textbook, breadth through readings and interfaces that capture diverse users and uses, and depth through the term project.

The (subject-to-change) list of topics are:

- AI Explainability
- Recommendation Systems
Typical Class Structure

Three-hour classes are long! To ensure that classes are dynamic and digestible, I envision that most weeks will use the following structure with a range of activities:

- AI News of the Week (11–11:15)
- Research Paper Discussion (11:15–12:30)
  - Small Groups Write Summaries (11:15–11:30)
  - Guided Discussion (11:30–12:25)
  - Exit Questions (12:25–12:30)
- Break (12:30–12:45)
- Human-AI Interface Exploration (12:45–1:15)
- Book Discussion / Project Work Time (1:15–1:45)

Course Expectations

On the first day of class we will collaboratively create together a list of shared expectations for:

Students

- [To be Updated]

Instructor

- [To be Updated]

Reading Before Class

There is a fair bit of reading in this class - more near the start when we progress through the textbook, and less near the end when projects are underway.
For me to ensure you are doing the readings and to help guide classroom discussions, you will be asked to add at least three "comments" to research articles.

- Two comments can be notes about any sentence/section of text that you find to be especially interesting/important/confusing or a reply to another student. ("+1" or "👍" comments are helpful, but won't add towards your count.)
- At least one comment must be a question that we might incorporate into our class discussion.

**Discussions**

My expectation is that everyone participates in discussions of readings. Yet, I understand that research papers are often dense and difficult-to-understand and that many students may have limited experience reading scholarly articles. Participation can take many forms. Some are very comfortable speaking in front of a group as they form ideas. Some (like me) are shy and need more time to process.

To aid in the discussions, I plan to institute the following procedure:

- 15 minutes - At the start, students will work in small groups and will be assigned a section of the paper to summarize with bullet points and take note of any comments and questions noted by their peers ahead of class.
- 55 minutes - We will discuss the paper with each section led by each group.
- 5 minutes - Exit Ticket. Succinctly, students will fill out a form indicating the most important thing they learned and the most pressing question they still have.

Our goal is to understand these papers and how to incorporate their ideas into our own practices. To achieve this, I am open to suggestions and ideas for improving our discussions.

**Project Groups**

Students will possess unique skill sets and will likely work on distinct tasks, but all are expected to contribute "equally." This includes actively participating in group discussions, sharing ideas, and dividing work fairly. They should respect the opinions and ideas of their peers, and be open to constructive criticism. Communication is key, so students should ensure they are keeping everyone in the loop about their progress and any challenges they might be facing. Additionally, they should meet deadlines set by the group. Ultimately, the goal of a group project is not only to produce a high-quality output, but also to learn from each other and develop teamwork and collaboration skills.

This semester, I will be implementing peer evaluations for Deliverables 2 and 3. Peer evaluations are not graded and instead will be used in the following manner:
Students who receive low evaluations: I will do my best to intervene and determine an optimal path forward.

Students who receive very high evaluations: I will treat this as extra credit. If your grade is close to a 98, I'll bump you up to an HP grade.

**Use of Generative AI to Complete Assignments**

TLDR - You may use generative AI, but cite it! Preferably include a link to the source conversation and a short description of the edits you made. We will be experimenting with a range of AI systems in class, including generative AI systems.

UNC has created a set of guidelines for the use of generative AI in class ([https://sph.unc.edu/iis/syllabus-guidelines-for-generative-ai/](https://sph.unc.edu/iis/syllabus-guidelines-for-generative-ai/)). We will adhere to UNC’s Usage Philosophy. You may use generative AI for many activities, e.g. to complete assignments, to create study protocols, and to facilitate small group discussions in class. Disclaimer: Generative AI can provide inaccurate or misleading information. You are responsible for what you turn in. AI should help you think, not think for you.

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**General UNC Expectations**

**Student Support and Inclusion**

I understand that this semester there may be experiences outside of your control that impact your learning or your class performance. You have lives outside of this course, and this class takes place in challenging time. Please reach out to me if you are having a difficult time with this class.

My intention as an educator is to provide a safe and inclusive environment for all learners. I value the perspectives of individuals from all backgrounds reflecting the diversity of our students. It is my intent that the diversity that you all bring to our class be viewed as a resource, strength, and benefit.

**SILS Commitment to Diversity**

In support of the University’s diversity goals and the mission of the UNC School of Information and Library Science, SILS embraces and promotes diversity and inclusion in all their forms. We broadly define diversity to include ability, age, ethnicity, gender, gender identity, gender expression, immigration status, national origin, race, religion, sexual orientation, and socioeconomic status. SILS is committed to preparing our graduates to be leaders in an increasingly multicultural and global society.
To this end, we strive to:

- Ensure that our leadership, policies, and practices are inclusive.
- Integrate diversity into our curriculum and research.
- Promote and nurture an environment in which diverse perspectives and experiences are respected and valued.
- Recruit and retain students, faculty, and staff from traditionally underrepresented groups.
- Participate in outreach to underserved communities in North Carolina and beyond.

We are committed to cultivating an academic environment that is open, representative, and equitable to all.

~The Faculty and Staff of the UNC School of Information and Library Science

**Accessibility**

The University of North Carolina at Chapel Hill facilitates the implementation of reasonable accommodations, including resources and services, for students with disabilities, chronic medical conditions, a temporary disability or pregnancy complications resulting in barriers to fully accessing University courses, programs and activities.

Accommodations are determined through the Office of Accessibility Resources and Service (ARS) for individuals with documented qualifying disabilities in accordance with applicable state and federal laws. See the ARS Website for contact information: [https://ars.unc.edu](https://ars.unc.edu) or email [ars@unc.edu](mailto:ars@unc.edu).

**Mental Health**

If you are experiencing distress or concerned about the well-being of another student, please let someone know. SILS Student Services ([https://sils.unc.edu/student-services](https://sils.unc.edu/student-services)) and the UNC Dean of Students ([https://dos.unc.edu/](https://dos.unc.edu/)) are good resources.

CAPS is strongly committed to addressing the mental health needs of a diverse student body through timely access to consultation and connection to clinically appropriate services, whether for short or long-term needs. Go to their website: [https://caps.unc.edu/](https://caps.unc.edu/) or visit their facilities on the third floor of the Campus Health Services building for a walk-in evaluation to learn more.

**Title IX**

Any student who is impacted by discrimination, harassment, interpersonal (relationship) violence, sexual violence, sexual exploitation, or stalking is encouraged to seek resources on campus or in the community. Please contact the Director of Title IX Compliance (Adrienne Allison – [Adrienne.allison@unc.edu](mailto:Adrienne.allison@unc.edu)), Report and Response Coordinators in the Equal Opportunity and
Compliance Office (reportandresponse@unc.edu), Counseling and Psychological Services (https://caps.unc.edu, confidential), or the Gender Violence Services Coordinators (gvsc@unc.edu; confidential) to discuss your specific needs. Additional resources are available at http://safe.unc.edu.

**UNC Honor Code**

All students are expected to follow the guidelines of the UNC honor code. In particular, students are expected to refrain from “lying, cheating, or stealing” in the academic context. If you are unsure about which actions violate that honor code, please see me or consult http://honor.unc.edu.

Individual assignments must be completed individually – without collaboration with informed others (e.g., classmates, people who have taken the class in the past, friends or family members with UX expertise). Group projects, of course, require working together.

Be careful about plagiarism. Whenever you use the words or ideas of others, either as direct quotes or paraphrased text, they should be properly attributed through quotations and/or citations. APA citation format is required for assignments in this class. A handout on plagiarism developed by the Writing Center provides an overview of plagiarism and offers suggestions for avoiding it.