INLS 719: Usability Evaluation and Testing, Fall 2023
Wednesdays, 5:45-8:30pm
Manning 208

Instructor: Dr. William Payne
Office: Manning 022 (garden level/basement)
Office Hours: Most days of the week, sign up using Booking link in Canvas.
Instructor email: william.payne@unc.edu

This is an in-person, synchronous course.

Readings for the class (e.g., book chapters, articles) are available electronically through UNC Libraries or online by the author/publisher. We will read several chapters from the following two books:
- [HUT] Rubin & Chisnell. 2008. *Handbook of usability testing* (Second edition)*.* Wiley & Sons. https://catalog.lib.unc.edu/catalog/UNCb8039738
- [MUX] Albert, W. & Tullis, T. 2013. *Measuring the User Experience* (Second edition)*.* Elsevier. https://catalog.lib.unc.edu/catalog/UNCb8656119.
- [OUX] Kuniavsky, M., Goodman, E., & Moed, A. 2012. *Observing the user experience: A practitioner's guide to user research* (Second edition). Burlington, MA. Morgan Kaufman. https://catalog.lib.unc.edu/catalog/UNCb9923107
- [IxD] Sharp, Preece, & Rogers. 2019. *Interaction Design: Beyond Human-Computer Interaction.* (Fifth edition).
  - [Note: Assigned chapters are in the course reserves– Chapter order is different across fourth, fifth, and sixth editions].

Other books may be useful to you as you work on your projects or as a practitioner.
- [UT] Hertzum. 2020. *Usability testing: A practitioner's guide to evaluating the user experience.* Morgan & Claypool. https://catalog.lib.unc.edu/catalog/UNCb9885658
- The Interaction Design Foundation. *The Encyclopedia of Human-Computer Interaction*. https://www.interaction-design.org/literature/book/the-encyclopedia-of-human-computer-interaction-2nd-ed/
- Usability.gov. https://www.usability.gov/
- 18F Methods https://methods.18f.gov/

Canvas will be used for course materials. The syllabus, schedule, readings, and assignment details will be uploaded to Canvas. Any changes will be via email and in class (if possible).

About the course
There are several objectives for this course; by the end of the semester, you should:

- Develop an understanding of usability testing and evaluation concepts and techniques.
- Gain experience conducting both formal and informal usability evaluations.
- Develop skills as a usability testing moderator.
- Understand tradeoffs in applying different evaluation techniques.

- Gain hands-on experience with the details of designing, planning, conducting, and reporting results of a usability evaluation.

This course will introduce central concepts in usability engineering, testing, and evaluation:

- UX Lifecycle
- Interaction models and frameworks
- Contextual inquiry and analysis
- Requirements, modeling, task analysis
- Rapid evaluation and inspection techniques (heuristic eval; cognitive walkthrough)
- Use of design guidelines in evaluation
- UX goals and metrics
- Formal and informal testing techniques; formative and summative evaluation
- Preparation for testing; usability moderation skills; test plan development; IRB
- Participant recruitment; testing environments; testing materials
- Analysis of qualitative and quantitative UX data
- Evaluation reporting

As a teacher, I have two primary goals: (1) to help you develop a strong foundation of usability evaluation knowledge and skills, and (2) to create opportunities for you to apply what you have learned in interesting situations that you (or other information professionals) might encounter.

By the end of the course, I hope you will have *learned the fundamentals* of usability evaluation and testing, begun to develop a *toolbox of techniques* as well as the knowledge of when to use them, and *know where to find information* about usability evaluation and testing. I want you to be prepared to conduct a small usability evaluation in the future.

Expectations

On the first day of class, we will set our class expectations as a community. A copy of these will be saved in Canvas and copied below in version 2 of the syllabus.

Expectations set by the class [To be added on Day 1]

- [of everyone]
- [instructor]
- [self]
- [classmates and self]

Schedule

See schedule document inls719-schedule-fall2023-v#.pdf in Canvas*. Note: If there are schedule changes, the schedule document will be updated with a new version number (e.g., the schedule would have the filename inls719-schedule-fall2023-v2.pdf).*

There will be no class on 10/25, as I will be presenting work at two conferences in New York City: SigAccess Conference on Computers and Accessibility (ASSETS) and NYPL's Accessible Community, Culture, and Technology Fair. Test plans are due the following week, so I encourage groups to make use of this time for project work.

Assignments

Your grade for this course will be based on your participation in class sessions (20%), individual assignments (30%, 10% for each), and a group project with three deliverables (50%).

Participation in this class is essential. Be an active participant and respect quiet voices. I expect engaged and active participation in class. There are many ways to participate: asking questions, responding to questions, sharing related work experience, or listening to others' ideas and facilitating discussions to make sure everyone has a chance to participate. Participation counts for 20% of your final grade; however, quality is more important than quantity. Although I will not take attendance during class, you cannot participate if you do not attend. If there is something you don't understand, ask! Ask a question during class, come to my office hours, or contact me by email.

Three individual assignments will be given during the semester to give you an opportunity to apply what you are learning. Each assignment will be worth 10% of your grade (30% of total grade).

A group usability evaluation project will be completed over the course of the semester (50% of your grade). Students will work in teams to design and conduct a usability evaluation. Specific deliverables will include an outline of the users, goals, and tasks; a usability test plan; and a presentation of the usability evaluation results.

Grading

For graduate students, grades will be given as High Pass, Pass, Low Pass, or Fail. Final course grades will be as follows:

- High Pass: 95 - 100%
- Pass: 75 - 94.99%
- Low Pass: 70 - 74.99%
- Fail: under 70%

For undergraduate students, final course grades will be letter grades (i.e., A-F) unless the University allows a different grading scale for undergraduates. Course grades will be determined as follows:

- A: 95-100%
- A-: 90 – 91.99%
- B+: 88 - 89.99%
- B: 82 – 87.99%
- B-: 80 - 81.99%
- C+: 78 – 79.99%

- C: 72- -77.99%
- C-: 70 – 71.99%
- D+: 78-79.99%
- D: 60-71.99%
- F: < 60%

Logistics

Communication

As this is my first semester teaching this course, it is possible that I may make changes to the schedule and or assignments to balance or redistribute the load. These changes will be communicated to you as far in advance as possible during class sessions, in Canvas, and via email. You may opt-out of any changes to assignments.

Email is the most efficient way to communicate with the instructor outside of class for brief questions or notes. Normally, you should expect a response within 24 hours. For longer questions or interactions, please talk to me in office hours.

Please use your laptops or other electronic devices only to support your class participation.

Class Sessions and Preparation
The class schedule (in Canvas) describes what you should do to prepare for each class meeting. In a typical class/week, class may have the following components:

- Intro and Logistics: class infrastructure, set the agenda for the session, review upcoming assessments, etc.
- A review of highlights from readings to *reinforce your preparation*
- A break
- Discussion about the topic of the day
- Activities and/or group exercises to apply or extend what you have read
- UX tip presentation(s) from your classmates

Be an active participant and respect quiet voices. I expect engaged and active participation in class. There are many ways to participate: asking questions, responding to questions, sharing related work experience, or listening to others' ideas and facilitating discussions to make sure everyone has a chance to participate. Participation counts for a percentage of your final grade; however, quality is more important than quantity. Although I will not take attendance during class, you cannot participate if you do not attend.

Ask questions. If there is something you don't understand, ask! Ask a question during class, come to my office hours, or contact me by email.

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 (https://sils.unc.edu/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 communicates 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 or email 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) and the UNC Dean of Students (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/ 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), 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.

Resources for further support

There are many important and useful campus resources and services available to you as a UNC student. Please take some time to review the list of campus resources and services. Here is an incomplete list of resources or services (in no specific order):

- UNC Libraries including interlibrary loan, campus delivery and other services,
- SILS IT Services and help desk (https://sils.unc.edu/it-services), Campus ITS (https://its.unc.edu),
- UNC Odum Institute for Research in Social Science (https://odum.unc.edu) for research support,
- UNC Writing Center (https://writingcenter.unc.edu) for writing support,
- UNC Learning Center (https://learningcenter.unc.edu) for learning support,

- UNC Counseling and Psychological Services (CAPS, https://caps.unc.edu), Campus Health (https://campushealth.unc.edu)
- The Sonja Haynes Stone Center for Black Culture and History (https://stonecenter.unc.edu),
- LGBTQ Center (https://lgbtq.unc.edu) which maintains a list of gender neutral restrooms on campus,
- University Office for Diversity and Inclusion (https://diversity.unc.edu),
- Carolina Women's Center (https://womenscenter.unc.edu),
- International Student and Scholar Services (https://isss.unc.edu),
- Carolina Grad Student F1RSTS for first-generation graduate students (https://graddiversity.unc.edu/initiatives/1st-gen-grads/), Carolina Firsts first-generation undergraduate students (https://studentsuccess.unc.edu/carolina-firsts/),
- Resources for Student Veterans (https://dos.unc.edu/student-veterans-resources/).
- UNC American Indian Center (https://americanindiancenter.unc.edu),
- Parenting@UNC (https://womenscenter.unc.edu/resources/parenting/).
- If you are an employee with benefits at UNC, there is also the Employee Assistance Program which can provide confidential counseling or resources (https://hr.unc.edu/benefits/work-life/eap/).
- The UNC Healthy Heels blog may also be of interest (https://healthyheels.org).

Ethics and academic integrity

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.

You can learn more about the UNC Honor Code at http://honor.unc.edu and about the Instrument of Student Governance at http://instrument.unc.edu.

Ethics and academic integrity

As information professionals, ethics and academic integrity are important. To that end, I've listed below some ethical statements or guidelines for professional organizations to which you may belong.

- American Library Association (ALA), Professional Ethics: http://www.ala.org/tools/ethics
- Association of Information Science and Technology (ASIST) Professional Guidelines: https://www.asist.org/about/asist-professional-guidelines/
- Association of Computing Machinery (ACM), Code of Ethics and Professional Conduct: https://www.acm.org/code-of-ethics
- Special Libraries Association (SLA) Professional Ethics Guidelines

- https://www.sla.org/about-sla/competencies/sla-professional-ethics-guidelines/
- American Psychological Association (APA), Ethical Principles of Psychologists and Code of Conduct (especially Section 8: Research and Publication): https://www.apa.org/ethics/code
- American Medical Informatics Association (AMIA) Code of Professional and Ethical Conduct: https://academic.oup.com/jamia/article/25/11/1579/5134082 linked from https://www.amia.org/about-amia/ethics

Use of Generative AI

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/). 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.

If you use generative AI, cite it! Preferably include a link to the source conversation and a short description of the edits you made. In this class, we have an opportunity to apply our usability knowledge to generative AI systems as the world is only beginning to understand them.

Revision history

- v1 – released on the first day of class