

INF 385P: Usability

UNIQUE: 28409 Fall 2023

CLASS MEETS: Tuesdays 6:30 – 9:30 pm | Room: UTA 1.208

Instructor: Natalie Dare Pronouns: She/Her/Hers Office hours: Email, By appointment over Zoom or Google Meets Email: <u>nataliemiller@utexas.edu</u>

Course Description

PRE-REQUISITES FOR THE COURSE: Graduate standing

UNIVERSITY CATALOG COURSE DESCRIPTION

Though this course is titled "Usability", it recognizes that usability as it is practiced today often entails a blurring of lines with the related disciplines of Human-Computer Interaction, Information Architecture, Ethnography, Accessibility, and Human Factors. As such, what was traditionally known as usability, has over the past 20 years been substantially broadened, a fact reflected in its modern re-expression such as "User Experience" (UX) research, "User-centered Design" (UCD), or even "Design Thinking" (DT).

Regardless of which name we use, or which specific domains we draw guidance from, all roads come together in the primary objective of this course: giving students hands-on training so they can start to acquire the "tablestakes" skills necessary for conducting user research in fast-paced and agile industry environments.

Specifically, this course will introduce some of the core UX research methods in use today, as well as how these methods are best applied to help teams focus on data-driven results aimed at ensuring successful products that are useful, efficient, learnable, equitable and enjoyable.



Accordingly, the class will cover 3 major areas:

- 1. The role of UX testing in the design process, including which methods are best suited to specific types of questions and at specific points along the development cycle
- 2. The joint process of research planning, implementation, data analysis and synthesis, as well as the final reporting of findings to stakeholders
- 3. The "real world" application of these skills to industry-paced projects

LEARNING OUTCOMES

- Have an in-depth understanding of some primary UX methods relevant to product development (e.g. Heuristic evaluation, Moderated User testing, UX Benchmarking).
- 2. Understand the principles of other important UX tools/methods (e.g. Information architecture tests (card-sorts), RITE testing, Competitive Analysis, Thematic coding of qualitative data, etc.).
- 3. Have a working understanding of the most frequently used UX methods at each point of the development lifecycle, with a specific focus on which methods are best suited to evaluative research.
- 4. Learn the scientific underpinnings of the various methodologies, including the specific advantages and disadvantages of each.

MY PERSONAL GOALS FOR YOU

In addition to content-specific objectives stated above, I have these personal goals for each student:

- to get you to think deeply and carefully about the subject,
- to help you to genuinely like the subject, and provide a foundation of interest for further usability courses
- to provide knowledge and skills useful to you in your career,
- to make you proud of your achievements in this course, and, hopefully, have a little fun in the process.

How Will You Learn?

STATEMENT OF LEARNING SUCCESS

Your success in this class is important to me. We all learn differently, and everyone struggles sometimes. You are not, ever, the only one having difficulty! If there are aspects of this course that prevent you from learning or exclude you, please let me know as soon as possible. Together we will develop strategies to meet both your needs and the requirements of the course. I also encourage you to reach out to the student resources available through UT.



TEACHING MODALITY INFORMATION

This course will be taught in person and is a combination of intensive readings from journal articles and book chapters, self-directed learning within teams, as well as a semester-long project. There will be substantial team work done in each class meeting. Attendance and participation in class are critical to each individual student's success and to the value that this type of interactive course provides. Students are expected to come to class prepared to engage in both smaller collaborative groups and in large class discussions and presentations. Students must complete all required readings prior to each class and submit all assignments on time.

COMMUNICATION

The course Canvas site can be found at <u>utexas.instructure.com</u>. Please email me through Canvas. You are responsible for ensuring that the primary email address you have recorded with the university is the one you will check for course communications because that is the email address that Canvas uses.

ASKING FOR HELP

The university is committed to creating an accessible and inclusive learning environment consistent with university policy and federal and state law. Please let me know if you experience any barriers to learning so I can work with you to ensure you have equal opportunity to participate fully in this course. If you are a student with a disability, or think you may have a disability, and need accommodations please contact Disability & Access (D&A). Please refer to the D&A website for more information: <u>http://diversity.utexas.edu/disability/</u>. If you are already registered with D&A, please deliver your Accommodation Letter to me as early as possible in the semester so we can discuss your approved accommodations and needs in this course.

DISABILITY & ACCESS (D&A)

The university is committed to creating an accessible and inclusive learning environment consistent with university policy and federal and state law. Please let me know if you experience any barriers to learning so I can work with you to ensure you have equal opportunity to participate fully in this course. If you are a student with a disability, or think you may have a disability, and need accommodations please contact Disability & Access (D&A). Please refer to the D&A website for more information: <u>http://diversity.utexas.edu/disability/</u>. If you are already registered with D&A, please deliver your Accommodation Letter to me as early as possible in the semester so we can discuss your approved accommodations and needs in this course.



Course Requirements and Grading

REQUIRED MATERIALS

Portigal, S. (2013). *Interviewing Users: How to Uncover Compelling Insights*. Brooklyn, NY: Rosenfeld Media. ISBN: 9781933820118.

Fitzpatrick, R. (2014). *The Mom Test: How to talk to customers & learn if your business is a good idea when everyone else is lying to you.* London: Foundercentric. ISBN: 1492180742.

Rubin, J., & Chisnell, D. (2008). *Handbook of Usability Testing: How to Plan, Design, and Conduct Effective Tests (2nd edition)*. Indiana: Wiley. ISBN: 0470185481.

REQUIRED DEVICES

- Laptop computers for use in and outside of class
- Mobile device with App Store access (see me if this is an issue and we can work on accommodations).

ASSIGNMENTS

- <u>All assignments are due by midnight</u>, on the date listed.
- All readings are due before class the day we discuss them.
- Assignments will be uploaded to Canvas.
- There will be no resubmitting of assignments for higher grades (no re-do's).
- Each student will be required to present an in-class synopsis of one assigned reading topic. There will be a PDF covering the instructions re: the reading presentations.
- Along with the key deliverables for your course project, you will also be graded by your team member peers. Your peers will grade you in terms of your participation and the quality of your contribution to the overall small group effort. The peer grades will be combined as part of the final report grade.

| Assignments | % of Total Grade |
|---|------------------|
| 1. Reading Presentations (Individual) | 10% |
| 2. Heuristic Evaluation (Group) | 10% |
| 3. Competitive Analysis (Group) | 10% |
| 4. Recruitment Screener (Group) | 10% |
| 5. Moderator Script and Test Packet (Group) | 15% |



| 6. Final Report & Presentation (Group) | 35% |
|--|-----|
| 7. Peer Reviews by Group Members | 10% |

This table represents how you will demonstrate your learning & how we will assess the degree to which you have done so.

LATE WORK AND MAKING UP MISSED WORK

Late work is accepted and subject to a 10 point grade reduction for every 24 hours late. If you (or your group) are not able to complete an assignment by the due date, it would be best for you to hand in as much of it as you have done. It will help if you notify me in advance about any emergency circumstances that will adversely affect completion of an assignment.

ABSENCES

You will not be graded directly on attendance. You are adults and are expected to be present for all courserelated activities. You should plan to be in the class meetings.

If you are absent or unable to participate on the day that your team meets, you are responsible for providing your team with the necessary information to compensate for your absence. It is crucial to keep in communication with your team; you are responsible for letting both your team and myself know if you cannot make it to a class.

Excused Absence: The only absences that will be considered excused are for religious holy days or extenuating circumstances due to an emergency. You will not be penalized for this absence, although you will still be responsible for any work you will miss on the day of absence if applicable. If you have to be absent, use your resources wisely. Check materials on Canvas (lecture slides etc.), ask your team and other classmates to get a run-down and notes on any lessons you miss. If you have to miss class for an extended period due to a protracted illness or similar reason, we will work with University Health Services, and we will treat your needs as a special case and do everything to help you survive and complete the class.

+/- GRADNG POLICY

The final class grades will include +/- grades.



GRADE BREAKS

| Grade | Cutoff |
|----------------------------|--------|
| A | 94% |
| A- | 90% |
| B+ | 87% |
| В | 84% |
| В- | 80% |
| C+ | 77% |
| С | 74% |
| C- | 70% |
| B- C+ C- D+ D- | 67% |
| D | 64% |
| | 60% |
| F | <60% |

CourseOutline

All instructions, assignments, readings, rubrics and essential information will be on the Canvas website at <u>utexas.instructure.com</u>. Check Canvas regularly. <u>Changes to the schedule may be made at my discretion if</u> <u>circumstances require. I will announce any such changes in class and will also communicate them via a Canvas</u> <u>announcement.</u> It is your responsibility to note these changes when announced, and I will do my best to ensure that you are notified of changes with as much advance notice as possible.



| # | Date | Topics | Readings | Assignments due |
|---|------|--|---|--|
| 1 | 8/22 | Introductions Syllabus Course Objectives Overview of reading presentations Lecture: Introduction to Mural, Information Architecture, Brief History of UX | For 8/29 - Fitzpatrick: Ch. 1, 2, 3, 4 - Articles 1, 2 | |
| 2 | 8/29 | Lecture: Heuristic Eval, Task Analysis, Comp Analysis Class Project Kickoff (review big picture, milestones, deliverables, <i>team/project selection best practices</i>) Reading Presentations: Group Work: Generate high-level project tasks, Gannt Chart/Project Timeline, Start Heuristic Eval | For 9/05 - Rubin & Chisnell: Ch. 1, 2, 3, 4 - Articles: 3, 4 | Reading Presentations (student assignment & prompt in Canvas) Heuristic eval due in Canvas on 9/12 |
| 3 | 9/05 | Reading Presentations: Lecture: Screeners & Moderator Scripts, Recruiting Group Work: Heuristic Eval, Synthesize diagram, Competitive Analysis | For 9/12 - Portigal: Ch. 1, 2 - Articles: 9, 10 | Reading Presentations (student assignment & prompt in Canvas) |
| 4 | 9/12 | Reading Presentations: Lecture: System Usability Scale (SUS), T-O-T, and other testing materials Group Work: Competitive Analysis | For 9/19 - Rubin & Chisnell: Ch. 5, 7 - Articles: 11, 12, 14 | Reading Presentations (student assignment & prompt in Canvas) |
| 5 | 9/19 | Reading Presentations: Lecture: In-Person & remote testing, Intro to Figma Group Work: screener, moderator script, task building | For 9/26 - Rubin & Chisnell: Ch. 8 - Articles: 5, 6, 8,19 | Reading Presentations (student assignment & prompt in Canvas) Competitive Analysis due in Canvas on 9/26 |



| 6 | 9/26 | Reading Presentations: Lecture: Qualitative methods and best practices Group Work: screener, moderator script, task building | For 10/03 – Portigal: Ch. 3 – Rubin & Chisnell: Ch. 6 – Articles: 17 | Reading Presentations (student assignment & prompt in Canvas) Screener due in Canvas on 10/10 |
|----|-------|---|--|---|
| 7 | 10/03 | Reading Presentations: Lecture: Quantitative Methods, A/B testing, usability benchmarking Group Work: moderator script, participant packets, coding sheet | For 10/10 - Portigal: Ch. 5, 6 - Rubin & Chisnell: Ch. 9 - Articles: | Reading Presentations (student assignment & prompt in Canvas) Moderator Script, Interview materials & test plans due in Canvas on 10/24 |
| 8 | 10/10 | Reading Presentations: Check-in: Interview materials, script and test plans, Group Work: Test Dry Runs using all materials (PILOT) | For 10/17 – Portigal: Ch. 7, 8 – Rubin & Chisnell: Ch.10 – Articles: 13 | Reading Presentations (student assignment & prompt in Canvas) |
| 9 | 10/17 | Reading Presentations: Lecture: Affinity Diagrams, Synthesis & Analysis Group Work: Recruiting & Run a Pilot Test! | For 10/24 - Portigal: Ch. 9 - Rubin & Chisnell: Ch.11 - Articles: 15 | Reading Presentations (student assignment & prompt in Canvas) |
| 10 | 10/24 | Reading Presentations: Lecture: Report Creation, review expectations for report and example reports for final project. Presentation Expectations. Group Work: Recruiting, User testing, data analysis | For 11/07 - Rubin & Chisnell: Ch. 12, 13 - Articles: 16 | Reading Presentations (student assignment & prompt in Canvas) |
| 11 | 10/31 | NO CLASS! Happy Halloween! Expectations: Group Work: Cont. Testing, Start Analysis & Report Creation | | |



| 12 | 11/07 | Reading Presentations: Check-in: report creation Group Work: Cont. report and presentation | For 11/14 – Portigal:Ch. 4 – Rubin & Chisnell: Ch. 14 – Articles: 18 | Reading Presentations (student assignment & prompt in Canvas) |
|----|-------|--|--|---|
| 13 | 11/14 | Reading Presentations: – Lecture: Storytelling, Journey Maps & Stakeholder buy-in – Group Work: finalizing report and presentation | | Final reports due on 11/28 in Canvas |
| | 11/21 | FALL BREAK: Thanksgiving, no class | | Have FUN |
| 14 | 11/28 | - FINAL Presentations | | |

Course Policies and Disclosures

ACADEMIC INTEGRITY EXPECTATIONS

Students who violate University rules on academic misconduct are subject to the student conduct process. A student found responsible for academic misconduct may be assigned both a status sanction and a grade impact for the course. The grade impact could range from a zero on the assignment in question up to a failing grade in the course. A status sanction can range from a written warning, probation, deferred suspension and/or dismissal from the University. To learn more about academic integrity standards, tips for avoiding a potential academic misconduct violation, and the overall conduct process, please visit the Student Conduct and Academic Integrity website at: http://deanofstudents.utexas.edu/conduct.

CONFIDENTIALITY OF CLASS RECORDINGS

I do not plan to record any classes at this time. This is subject to change. Class recordings are reserved only for students in this class for educational purposes and are protected under FERPA. The recordings should not be shared outside the class in any form. Violation of this restriction by a student could lead to Student Misconduct proceedings.

GETTING HELP WITH TECHNOLOGY

Students needing help with technology in this course should contact the ITS Service Desk



ARTIFICIAL INTELLIGENCE (AI, ML, DL, CHATGPT, ETC.)

"The creation of artificial intelligence tools for widespread use is an exciting innovation. These tools have both appropriate and inappropriate uses in classwork. The use of artificial intelligence tools (such as ChatGPT) in this class:

...is strictly prohibited. This includes using AI to generate ideas, outline an approach, answer questions, solve problems, or create original language. All work in this course must be your own or created in group work, where allowed.

...shall be permitted on a limited basis. You will be informed as to the assignments for which AI may be utilized. You are also welcome to seek my prior-approval to use AI writing tools on any assignment. In either instance, AI writing tools should be used with caution and proper citation, as the use of AI should be properly attributed. Using AI writing tools without my permission or authorization, or failing to properly cite AI even where permitted, shall constitute a violation of UT Austin's Institutional Rules on academic integrity.

... is permitted for students who wish to use them, provided the content generated by AI is properly cited.

If you are considering the use of AI writing tools but are unsure if you are allowed or the extent to which they may be utilized appropriately, please ask."

For more information about AI in education, see the Center for Teaching and Learning's <u>"5 Things to Know</u> <u>about ChatGPT" webpage</u> that includes <u>additional suggested syllabi statements</u> for your consideration.]

SHARING OF COURSE MATERIALS IS PROHIBITED

No materials used in this class, including, but not limited to, lecture hand-outs, videos, assessments (quizzes, exams, papers, projects, homework assignments), in-class materials, review sheets, and additional problem sets, may be shared online or with anyone outside of the class without explicit, written permission of the instructor. Unauthorized sharing of materials promotes cheating. The University is well aware of the sites used for sharing materials, and any materials found online that are associated with you, or any suspected unauthorized sharing of materials, will be reported to <u>Student Conduct and Academic Integrity</u> in the Office of the Dean of Students. These reports can result in sanctions, including failure of the course.

RELIGIOUS HOLY DAYS

By <u>UT Austin policy</u>, you must notify me of your pending absence for a religious holy day as far in advance as possible of the date of observance. If you must miss a class, an examination, a work assignment, or a project in order to observe a religious holy day, you will be given an opportunity to complete the missed work within a



reasonable time after the absence.

NAMES AND PRONOUNS

Class rosters are provided to the instructor with the student's legal name, unless they have added a chosen name with the registrar's office. If you have not yet done so, I will gladly honor your request to address you with the name and pronouns that you prefer for me to use for you. It is helpful to advise me of any changes or needs regarding your name and pronouns early in the semester so that I may make appropriate updates to my records and be informed about how to support you in this class.

- For instructions on how to add your pronouns to Canvas, visit this site.
- If you would like to update your chosen name with the registrar's office, you can do so <u>here</u>, and reference <u>this guide</u>.
- For additional guidelines prepared by the Gender and Sexuality Center for changing your name on various campus systems, see the Resources page under UT Resources <u>here</u>.

University Resources for Students

COUNSELING AND MENTAL HEALTH CENTER (CMHC)

Students who are struggling for any reason and who believe that it might impact their performance in the course are urged to reach out to Bryce Moffett if they feel comfortable. This will allow her to provide any resources or accommodations that she can. If immediate mental health assistance is needed, call the Counseling and Mental Health Center (CMHC) at 512-471-3515 or you may also contact Bryce Moffett, LCSW (iSchool CARE counselor) at 512-232-4449. Bryce's office is located in FAC18S and she holds drop in Office Hours on Wednesday from 2-3pm. For urgent mental health concerns, please contact the CMHC 24/7 Crisis Line at 512-471-2255.

Important Safety Information

Carrying of Handguns on Campus

Students in this class should be aware of the following university policies related to Texas' Open Carry Law:

- Students in this class who hold a license to carry are asked to <u>review the university policy regarding</u> <u>campus carry</u>.
- Individuals who hold a license to carry are eligible to carry a concealed handgun on campus, including in most outdoor areas, buildings and spaces that are accessible to the public, and in classrooms.
- It is the responsibility of concealed-carry license holders to carry their handguns on or about their person at all times while on campus. Open carry is NOT permitted, meaning that a license holder may



not carry a partially or wholly visible handgun on campus premises or on any university driveway, street, sidewalk or walkway, parking lot, parking garage, or other parking area.

• Per my right, I prohibit carrying of handguns in my personal office. Note that this information will also be conveyed to all students verbally during the first week of class. This written notice is intended to reinforce the verbal notification, and is not a "legally effective" means of notification in its own right.

TITLE IX DISCLOSURE

Beginning January 1, 2020, Texas Education Code, Section 51.252 (formerly known as Senate Bill 212) requires all employees of Texas universities, including faculty, to report to the <u>Title IX Office</u> any information regarding incidents of sexual harassment, sexual assault, dating violence, or stalking that is disclosed to them. Texas law requires that all employees who witness or receive information about incidents of this type (including, but not limited to, written forms, applications, one-on-one conversations, class assignments, class discussions, or third-party reports) must report it to the Title IX Coordinator. Before talking with me, or with any faculty or staff member about a Title IX-related incident, please remember that I will be required to report this information.

Although graduate teaching and research assistants are not subject to Texas Education Code, Section 51.252, they are <u>mandatory reporters</u> under federal Title IX regulations and are required to report <u>a wide range of</u> <u>behaviors we refer to as sexual misconduct</u>, including the types of misconduct covered under Texas Education Code, Section 51.252. Title IX of the Education Amendments of 1972 is a federal civil rights law that prohibits discrimination on the basis of sex – including pregnancy and parental status – in educational programs and activities. The Title IX Office has developed supportive ways and compiled campus resources to support all impacted by a Title IX matter.

If you would like to speak with a case manager, who can provide support, resources, or academic accommodations, in the Title IX Office, please email: <u>supportandresources@austin.utexas.edu</u>. Case managers can also provide support, resources, and accommodations for pregnant, nursing, and parenting students.

For more information about reporting options and resources, please visit: <u>https://titleix.utexas.edu</u>, contact the Title IX Office via email at: <u>titleix@austin.utexas.edu</u>, or call 512-471-0419.

Campus Safety



The following are recommendations regarding emergency evacuation from the <u>Office of Emergency</u> <u>Management</u>, 512-232-2114:

- Students should sign up for Campus Emergency Text Alerts at the page linked above.
- Occupants of buildings on The University of Texas at Austin campus must evacuate buildings when a fire alarm is activated. Alarm activation or announcement requires exiting and assembling outside.
- Familiarize yourself with all exit doors of each classroom and building you may occupy. Remember that the nearest exit door may not be the one you used when entering the building.
- Students requiring assistance in evacuation shall inform their instructor in writing during the first week of class.
- In the event of an evacuation, follow the instruction of faculty or class instructors. Do not re-enter a building unless given instructions by the following: Austin Fire Department, The University of Texas at Austin Police Department, or Fire Prevention Services office.
- For more information, please visit the Office of Emergency Management.

University Resources

For a list of university resources that may be helpful to you as you engage with and navigate your courses and the university, see the <u>University Resources Students Canvas page</u>.