

INF 388C: Understanding and Serving Users

Fall, 2025, We meet in person at UTA 1.208, every Wednesday, 3pm-6pm.

Instructor: Andrew Dillon

TA is Klara Guan: email: (see Canvas site)

Office hours by Zoom: TA: Friday 2-3pm, Prof: Thurs 9-11 as available, will be noted each week in class)-- see Zoom links at bottom of page (under Course Summary header). You must use our UT login to access. My schedule is subject to a lot of change as the semester progresses so feel free also to use email, the TA, and the discussion board).

Overview

Information systems are everywhere, in the form of products, tools, services and environments we experience, Ideally these are designed and exist to serve human needs but how do we know what people want? How can we ensure that the information products or services we deliver to people fulfill their expectations, support their productivity or provide pleasure in use ? How can we reliably anticipate human responses to information problems and situations? In what ways are the people we design for or serve alike or different and how do people change with experience? To really deliver on the promise of information, we must be able to shape solutions that matter for real people, so this course is a dive into the psychology and behaviors of people when they use information.

The course will provide you with a strong theoretical understanding of the drivers, limits and variations of human responses to design and an appreciation of some of the core methods employed in user-centered design to guide decisions as we create and evaluate solutions for real contexts. We will explore both the commonalities and differences between people, consider how learning and skill development occurs, what culture can tell us about users, why new technologies are accepted or resisted, all the while considering how knowledge of this kind can be leveraged and applied to help us design and implement more humanely appropriate information systems.

The goal is for you to have a rich and applicable sense of *user-centeredness* as a core value, with an associated set of methods, rather than an advertising attribute or brand claim. You will apply the material we cover to real-world observations of information designs that you experience routinely, and in so doing, learn to frame these interactions in ways that can support practical improvements and trade-offs in the design. You will also have the chance to tailor your final deliverable to a problem or topic that is meaningful to you in more than just this course. It is my intent that you leave the course with a new, deeper, understanding of how our information world is being shaped and how you can ensure the human experience of this world is improved. The course complements many other classes at the iSchool - you can expect some overlaps and some reinforcement of other material with a view to giving you a strong foundation for your studies and career as information professionals.

What will I learn?

Main skills and attitudes to be developed:

- Origins and meaning of user-centered design thinking
- Critical understanding of core human attributes in information processing
- Contextual awareness of organizational and cultural shapers of behavior and use
- Awareness of typical methods for reliably studying and reporting user experience

Learning Outcomes

1. Ability to articulate and justify user-centered design of information systems
2. Ability to observe and identify design problems and justify recommended improvements
3. Knowledge of the basic skills and methods applied by user-experience professionals
4. Understanding the role and literature of user-centeredness in contemporary information experiences

Class style

This is primarily a readings and critical discussion graduate seminar. Active involvement in classes is *essential* to learning. The deliverables for the course require you to observe and apply the materials to real world situations. So yes, you will have weekly readings which you are expected to complete. We will routinely break into discussion groups in class to address a concern in design, not all of which will be related to the readings but raise broader issues of how user-centered research and theories can be applied. And you will complete your own deliverables -- there is no group work here.

There are no prerequisites, students from all backgrounds are welcome. You do not need coding or design skills, statistical knowledge or experience in IT to learn in this course. You don't need to be committed to specific career path to benefit from a deeper understanding of people who use information products and services, all iSchool students, no matter their area of professional interest, will find ways of making this material relevant to their careers.

How to succeed in this course

Read, discuss, read again, keep an open mind and explore the concepts in ways that make personal sense for you. Understanding users requires you to challenge your own beliefs about what is good design or what might be an appropriate solution for others. You will learn that humans are both alike and unlike on many important dimensions and that the science of human experience offers rich insights into how we can create a better information infrastructure for our world. It is vital that you engage fully with the material from the start of the semester, you cannot

make up lost time or effort by trying to rush through this type of material at the end of the semester. This is a semester length immersion, not a sprint to complete an exam or test.

Learn to recognize the design flaws in our world by examining interactions you experience with products, services or spaces. These observations will form your design diary (one deliverable). Choose a topic that is meaningful to you for your final paper, focus on it deeply, and relate your readings and understandings appropriately (second deliverable).

Required Materials

The readings are linked from the Files menu where they are grouped by week. You can read in advance but the idea is to read *after* the class (e.g., Week 1's readings are *after* the first class, in anticipation of Week 2; the readings under Week 2 then are read *after* the second class meeting in preparation for material to be covered in Week 3). Each week there will likely be group discussions or exercises then a lecture section. There will usually be regular open time to explore issues that emerge or to handle questions about the assignments. I will almost certainly add further readings or modify content as the course proceeds depending on emerging issues. And I will invite UX professionals to visit the course and share their knowledge too.

Classroom expectations

Students are expected to attend and come prepared to participate actively in all class meetings. **Simply reading the material and producing the deliverables will *not* lead to sufficient learning** -- you must engage with the class fully if you want an education and not simply a grade.

Assignments/ Deliverables and Grades

There are two deliverables for this course, a series of design critiques based on your critical observation of information designs in the world, and an original research paper dealing with any topic related to our understanding of information users. Yes, you are required to write, individually. Your grade is also reflective of participation, as described below.

1. **Design Diary** (Identify and document design problems and justify recommended improvements)

33% of grade. Create an observational diary of user interactions with any information environment (computer, person, facility) where the interactive experience is challenged by poor or uninformed design choices. These interactions can be personally experienced or observed in others. Each entry should cover the context of occurrence, the nature of the problem from the user's perspective, an analytical/theoretical framing of the experience, and a clear recommendation for re-design that would improve the experience. Cite appropriate literature for each entry. The diary can be a mix of text, figures, photos, or any medium that conveys your point and is shareable with me. The complete diary should consist of 5 distinct entries. This deliverable gives you room to explore user concerns in whatever form makes most sense for you.

2. Research paper (on any topic addressing the role and literature of user-experiences)

33% of grade. Compose and present to the class a term paper (3000-5000 words) on a topic of your choosing that deals with our understanding of humans and the design of more humanly acceptable and usable information systems. You have broad remit here to cover material that is meaningful to you and your programs of study. The paper should demonstrate a critical and referenced treatment of your topic. It must be original, individual work and produced in a form that is presentable both in class as a talk (see schedule) but also as a written document for final submission.

3. Participation

33% of grade. Each week we will have open or small-group discussions about the readings and other relevant UX topics. Questions and prompts will also be posted on the Discussion Board. While you are not obligated to speak or respond every week, we do expect you to attend each class, engage actively with the material and in the conversations as you are comfortable. You will receive feedback across the semester on your participation. Absences from classes should be accounted for by the student, ideally in advance.

PLEASE NOTE: your deliverables are **your** individual work, and you are graded accordingly.

BOTH design diary and paper deliverables are due by Friday DEC 5th at NOON (midday) This is the Friday *after* the last class meeting. You may, and are definitely encouraged to, submit earlier. You have an opportunity during the semester to submit one or two design diary entries or paper ideas for feedback to the TA to help you refine your final deliverables. This is optional rather than required but it is advisable to take advantage of our excellent TA, Klara, with whom you can discuss ideas and design diary entries regularly before submission. If you have questions, you may also always contact me for advice or suggestions. We will also allow time weekly in class to discuss design diaries or term paper ideas. Mid-way through the semester we will have a session where you each get to present preliminary ideas for your final paper.

Course Outline

Note, the readings provided are *foundational* but *not sufficient* for delivering on your research paper. They represent a minimal reading load for the material covered in the classes but you should be prepared to seek out further readings based on your own interests and needs. There are several books among the readings, and while I direct you to specific chapters, you can take it as given that reading the whole book is worthwhile.

It is the nature of this type of graduate course that we pursue ideas as they emerge in the course discussions. *Consequently, further readings or adjustments to the schedule may occur as we progress.* I will always make this clear in class and via regular communication but it is your

responsibility to note these changes and adjust as needed. I intentionally leave time in the schedule open toward the end of the semester. This is often useful if the readings and discussions take us deeper into topics that we wish to explore or if concerns about the looming deliverables necessitate specific treatment of issues. We will collectively determine the best use of this meeting nearer the time. Note, the final two weeks of the semester involve you presenting your paper to the class. This is part of your deliverable requirement. I do not grade this, rather it is chance to refine your ideas and presentation skills which are increasingly important for UX professionals.

<u>Week</u>	<u>Date</u>	<u>Class Topic</u>	<u>Readings (if there's no link, see Files for PDF/e-copies by week)</u>
1	8/27	Intro and class overview	<p>Vicente, K (2004) <i>The Human Factor</i>, chapter 2 (see PDF)</p> <p>Harrison, S. et al (2007) The three paradigms of HCI. (see PDF)</p> <p>Ackerman, R, (2023) Design Thinking- Where did it go wrong?</p> <p>Dillon, A. (2023) Information as a human process. Chapter 1 of Understanding Users (p. 1-21)</p>
2	9/3	History of user-centered design	<p>Frascara and Noel (2009) What's missing in design education</p> <p>Ritter et al (2014) User-centered design, a brief history.</p> <p>Vardouli, T. (2016) User design: constructions of the user</p> <p>Iavari and Iavari (2006) Varieties of user-centeredness</p> <p>Dillon, A. (2023) the emergence of user-centeredness. Chapter 2 of Understanding Users (p 22-47)</p>
3	9/10	Design: science or art?	<p>Cross, N (2014) Designerly ways of knowing</p> <p>Bayazit N. (2004) Investigating Design</p> <p>Bryan Lawson (2005) <i>How Designers Think</i>, chapters 1-3</p> <p>Don Norman, (2013) https://jnd.org/rethinking-design-thinking/</p> <p>Dillon, A. (2023) Understanding Users Chapter 3</p>

4	9/17	Human information processing 1 Cognitive Architecture	Jeff Johnson: <i>Designing with the Mind in Mind</i>: chapters 1-5 Dillon, A. (2023) Understanding Users Chapters 4 and 5 Useful perspective: Workstation ergonomics Ergonomics and Design
5	9/24	Human Information processing 2 Learning, skills, and performance	Jeff Johnson: <i>Designing with the Mind in Mind</i>: chapters 6-10 Dillon, A. Understanding Users , see Chapter 6
6	10/01	Human information processing 3 Individual differences	Jeff Johnson: <i>Designing with the Mind in Mind</i>: chapters 11-14 Murman, D. (2015) The impact of age on cognition Turner and Turner (2010) Is stereotyping inevitable when designing v personas Sackett et al (2017) Individual Differences and their Measurement Vu and Sun (2019) Population Stereotypes Lintunen et al (2024) Cog Abilities predict UX Guest Speaker: Beth Hallmark on Job Searching/Portfolio building in
7	10/08	Socio-technical models of use Users in organizational contexts	Baxter and Sommerville (2011) Socio Technical Systems Lai (2017) Literature review of technology adoption models Girardi and Chiagouris (2018) The digital marketplace Pasmore et al (2019) Reflections: Socio-Technocal Systems Design

8	10/15	Cultural dynamics	Hofstede, G. (2011) Dimensionalizing Cultures
		How the world of users varies	Venaik and Brewer (2016) National Culture Dimensions: the perpetuation of cultural ignorance? MacVaugh and Schiavone (2010) Limites to the diffusion of innovation Hassna et al (2023) The roles of UI and uncertainty avoidance in B2C
9	10/22	Evaluating UX: Usability	Bevan et al (2015) What have we learned about usability since 1998? Hassenzahl and Tractinsky (2006) Lewis, J. (2018) Is the report of the death of the construct of usability an exaggeration? Jongmans et al (2023) Impact of website visual design on user experience and website evaluation
10	10/29	Evaluating UX: Acceptance	Alexandre et al (2018) Acceptance and Acceptability Criteria Venkatesh et al (2013) A unified theory of acceptance and use
11	11/05	Inspection and survey methods	Hornbaek et al (2025) Expert Analytic Methods Mahatody et al (2010) State of the Art on Cognitive Walkthrough Sauro and Lewis (2016) Standardized Usability Questionnaires, Chapter of <i>Quantifying the User Experience</i> (eCopy also available via UT library) Lewis, J. (2018) The System Usability Scale: Past, Present And Future

			Stige et al (2023) AI and UX: a review
			Beyer, H. and Holtzblatt, K (1997) The Four Principles of Contextual Enquiry
12	11/12	The future for UX Course Q&A	Nessler D. (2017) How to nail user interviews Ross,J (2018) The role of observation in user research. Suaro J. and Lewis (2016), A Crash Course in Statistics
13	11/19	Presentations	Group 1 students will present their research paper for Q&A
14	11/26	Thanksgiving Week	No class meeting
15	12/03	Presentations	Group 2 students will present their research paper for Q&A

Classroom Policies

Your success in this class is important to me. We all learn differently and I want this to be an environment for all. If there are aspects of this course that prevent you from learning or exclude you, please let me know. Together we'll 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. Many are listed below – never hesitate to ask if you have concerns – your time here matters.

Grading Policies

While following the standard grade structure for graduate work at UT and as outlined in the MSIS Handbook for iSchool students, I do not grade on a curve. All submitted work is read and assigned a grade by me. Clearly, with research papers and design diaries, final grades have a certain subjective quality. I will discuss this as we proceed through the semester as it is my aim to free you to think deeply and do your best work, not worry about points.

For each assignment I look for clarity, evidence of background reading and analysis, and originality. Grades of A reflect excellence, B+ is above satisfactory, B is work that I expect from any graduate student at a minimum, while B- represents work that gives me concern as to the student's viability in our program. While equal weighting is given to the two major assignments in the course, borderline grades are determined up or down based on class participation and the general engagement of the student in the course over the semester.

Absences

You are adults, I will treat you as such. If life challenges your ability to attend a class, please let me know and we can agree the best process. If life challenges your ability to attend several classes then you might have the wrong schedule for this class and should determine this in advance with your advisor.

GENERAL INFO CONCERNING CLASSES AT UT

SERVICES FOR STUDENTS WITH DISABILITIES

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 Services for Students with Disabilities (SSD). Please refer to SSD's website for contact and more information: <http://diversity.utexas.edu/disability/>. If you are already registered with SSD, 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.

COUNSELING AND MENTAL HEALTH CENTER

The [Counseling and Mental Health Center](#) serves UT's diverse campus community by providing high quality, innovative and culturally informed mental health programs and services that enhance and support students' well-being, academic and life goals. To learn more about your counseling and mental health options, call CMHC at (512) 471-3515. If you are experiencing a mental health crisis, call the CMHC Crisis Line 24/7 at (512) 471-2255.

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. It is a violation of the University's Student Honor Code and an act of academic dishonesty. The University is well aware of the sites used for sharing materials, and any materials found on such sites that are associated with a specific student, or any suspected unauthorized sharing of materials, will be reported to [Student Conduct and Academic Integrity](#) in the [Office of the Dean of Students](#). These reports can result in sanctions, including failure of the course.

STUDENT EMERGENCY SERVICES

UT's [Student Emergency Services](#) provides assistance, intervention, and referrals to support students navigating challenging or unexpected issues that impact their well-being and academic success. If you need to be absent from class due to a family emergency, medical or mental health concern, or academic difficulty due to crisis or an emergency situation, please register with [Student Emergency Services](#). SES will verify your situation and notify your professors.

TITLE IX REPORTING

Title IX is a federal law that protects against sex and gender-based discrimination, sexual harassment, sexual assault, sexual misconduct, dating/domestic violence and stalking at federally funded educational institutions. UT Austin is committed to fostering a learning and working environment free from discrimination in all its forms. When sexual misconduct occurs in our community, the university can:

1. Intervene to prevent harmful behavior from continuing or escalating.
2. Provide support and remedies to students and employees who have experienced harm or have become involved in a Title IX investigation.
3. Investigate and discipline violations of the university's [relevant policies](#).

Faculty members and certain staff members are considered "Responsible Employees" or "Mandatory Reporters," which means that they are required to report violations of Title IX to the Title IX Coordinator. **I am a Responsible Employee and must report any Title IX-related incidents** that are disclosed in writing, discussion, or one-on-one. Before talking with me or with any faculty or staff member about a Title IX-related incident, be sure to ask whether they are a responsible employee. If you want to speak with someone for support or remedies without making an official report to the university, email advocate@austin.utexas.edu For more information about reporting options and resources, visit the [Title IX Office](#) or email titleix@austin.utexas.edu.

CAMPUS SAFETY

The following are recommendations regarding emergency evacuation from the [Office of Campus Safety and Security](#), 512-471-5767,

- 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 [emergency preparedness](#).

BASIC NEEDS SECURITY

Any student who faces challenges securing their food or housing and believes this may affect their performance in the course is urged to contact the Dean of Students for support. UT maintains the UT Outpost (<https://deanofstudents.utexas.edu/emergency/utoutpost.php>) which is a free on-campus food pantry and career closet. Furthermore, please notify the professor if you are comfortable in doing so. This will enable him to provide any resources that he may possess.