## INF 382C. UNDERSTANDING & SERVING USERS (27140)

Instructor: Andrew Dillon

TA: Isabelle Schloss

Time: Wednesdays 12-3pm. ONLINE ONLY

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 or assist their work or tasks? How can we anticipate human responses to information problems and situations? In what ways are people 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 deeper and applicable sense of *user-centeredness* as a core value of the information field 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, richer, 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 use
* Awareness of typical methods for studying and reporting user experience

**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

This is 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.

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**:

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 an appropriate solution for others. You will learn that humans are both alike and unalike 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. Find a topic that is meaningful to you for your final paper, focus on it deeply,  and relate your readings and understandings appropriately.

**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 discussion or exercise then a lecture. There will usually be regular open time to explore issues that emerge or to handle questions about the assignments.  I may add further readings as the course proceeds depending on emerging issues.

**Classroom expectations**

Students are expected to attend and come prepared to participate 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.**Obviously in a Zoom format, we will face some challenges on interaction but let's proceed to engage as fully as we can.

**Assignments**

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.

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

50% 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)**

50% of grade.  Compose and present to the class a term paper (3000-5000 words approx.) 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.

A note on group projects: There are none. Your deliverables are your individual work, and you are graded accordingly

BOTH deliverables are due by Friday DEC 4th  at NOON. You may, and are encouraged to,  submit earlier but not later.   I will give you an opportunity during the semester to submit a design diary entry or paper idea  for feedback in case you have concerns about deliverables that are not addressed otherwise. This is optional, not required but it is advisable to take advantage of this opportunity.  If you have questions, you may always contact me for advise or suggestions. We will allow time weekly to discuss design diaries or term paper ideas.

**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 the 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.

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| **Week** | **Date** | **Class Topic** | **Readings**(see Files for linked copies) |
| **1** | **8/26** | **Intro and class overview** | Vicente, K (2004) *The Human Factor*, chapter 2 |
| **2** | **9/2** | **History of user-centered design** | Ritter et al (2014)  User-centered design, a brief history.  Vardouli, T. (2016) User design: constructions of the user  Iavari and Iavari (2006) Varieties of user-centeredness |
| **3** | **9/9** | **Design: science or art?** | Cross, N (2011) Design Ability  Bryan Lawson (2005) *How Designers Think,*chapters 1-3  Harrison, S. et al (2007) The three paradigms of HCI. |
| **4** | **9/16** | **Human information processing 1**  Cognitive Architecture | The physical layer of use (see video in files)   Ergonomics and Design  [Jeff Johnson: *Designing with the Mind in Mind*: chapters 1-5](https://ebookcentral-proquest-com.ezproxy.lib.utexas.edu/lib/utxa/detail.action?docID=1584420) |
| **5** | **9/23** | **Human Information processing 2**  Learning, skills, and performance | [Jeff Johnson: *Designing with the Mind in Mind:*chapters 6-10](https://ebookcentral-proquest-com.ezproxy.lib.utexas.edu/lib/utxa/detail.action?docID=1584420) |
| **6** | **9/30** | **Human information processing 3**  Individual differences | [Jeff Johnson: *Designing with the Mind in Mind:*chapters 11-14](https://ebookcentral-proquest-com.ezproxy.lib.utexas.edu/lib/utxa/reader.action?docID=1584420) |
| 7 | **10/7** | **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 |
| 8 | **10/14** | **Cultural dynamics**  How the world of users varies | Hofstede, G. (2011) Dimensionalizing Cultures  Venaik and Brewer (2016) National Culture Dimensions: the perpetuation of cultural ignorance |
| 9 | **10/21** | **User eXperience:  Usability, Hedonics, & Acceptance** | Alexandre et al (2018) Acceptance and Acceptability Criteria  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? |
| **10** | **10/28** | **Inspection methods for evaluating designs** | Mahatody et al (2010) State of the Art on Cognitive Walkthrough |
| 11 | **11/04** | **Survey and observation methods:** | Sauro and Lewis (2016) Standardized Usability Questionnaires, Chapter 8 of *Quantifying the User Experience*(eCopy also available via UT libraries)  Lewis, J. (2018) The System Usability Scale: Past, Present And Future  Nessler D. (2017) [How to nail user interviews](https://uxdesign.cc/how-to-nail-a-user-interviews-in-a-ux-hcd-or-design-thinking-process-full-guide-17d4eeee8dc3)  Ross,J (2018) [The role of observation in user research](https://www.uxmatters.com/mt/archives/2018/09/the-role-of-observation-in-user-research.php). |
| **12** | **11/11** | **Basic analysis of data from user studies**  **Course Q&A** | Suaro J. and Lewis (2016), A Crash Course in Statistics  General revision/wash up on issues from class |
| **13** | **11/18** | **Class presentations** | Group 1 students will present their research paper for Q&A |
| **q14** | **11/25** | **Thanksgiving Holiday -** | **No class meeting** |
| 15 | **12/4** | **Class presentations** | Group 2 students will present their research paper |

**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.

**Late work**

As both major deliverables are due at the end of the semester, or earlier.  You have freedom to submit on your schedule so manage your time well.

**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.

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**Student Rights & Responsibilities**

* You have a right to a learning environment that supports mental and physical wellness.
* You have a right to respect.
* You have a right to be assessed and graded fairly.
* You have a right to freedom of opinion and expression.
* You have a right to privacy and confidentiality.
* You have a right to meaningful and equal participation, to self-organize groups to improve your learning environment.
* You have a right to learn in an environment that is welcoming to all people. No student shall be isolated, excluded or diminished in any way.

With these rights come responsibilities:

* You are responsible for taking care of yourself, managing your time, and communicating with me and with others if things start to feel out of control or overwhelming.
* You are responsible for acting in a way that is worthy of respect and always respectful of others.
* Your experience with this course is directly related to the quality of the energy that you bring to it, and your energy shapes the quality of your peers’ experiences.
* You are responsible for creating an inclusive environment and for speaking up when someone is excluded.
* You are responsible for holding yourself accountable to these standards, holding each other to these standards, and holding the teaching team accountable as well.

**Personal Pronoun Preference**

Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with differences of race, culture, religion, politics, sexual orientation, gender, gender variance, and nationalities. Class rosters are provided to the instructor with the student’s legal name. I will gladly honor your request to address you differently than what appears on the roster. Please advise me of this preference early in the semester so that I may make appropriate changes to my records.

**University Policies**

Academic Integrity

Each student in the course is expected to abide by the University of Texas Hono rCode: “As a student of The University of Texas at Austin, I shall abide by the core values of the University and up hold academic integrity. ”**Plagiarism is taken very seriously at UT.**Therefore, if you use words or ideas that are not your own (or that you have used in previous class), you must cite your sources. Otherwise you will be guilty of plagiarism and subject to academic disciplinary action, including failure of the course. You are responsible for understanding UT’s Academic Honesty and the University Honor Code which can be found here: <http://deanofstudents.utexas.edu/sjs/acint_student.php>

**University Resources for Students**

Your success in this class is important to me. We will all need accommodations because we all learn differently. 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’ll develop strategies to meet both your needs and the requirements of the course. There are also a range of resources on campus:

*Services for Students with Disabilities*

This class respects and welcomes students of all backgrounds, identities, and abilities. If there are circumstances that make our learning environment and activities difficult, if you have medical information that you need to share with me, or if you need specific arrangements in case the building needs to be evacuated, please let me know. I am committed to creating an effective learning environment for all students, but I can only do so if you discuss your needs with me as early as possible. I promise to maintain the confidentiality of these discussions. If appropriate, also contact Services for Students with Disabilities, 512-471-6259 (voice) or1-866-329- 3986 (video phone). <http://ddce.utexas.edu/disability/about/>

*Counseling and Mental Health Center*

Do your best to maintain a healthy lifestyle this semester by eating well, exercising, avoiding drugs and alcohol, getting enough sleep and taking some time to relax. This will help you achieve your goals and cope with stress.

All of us benefit from support during times of struggle. You are not alone. There are many helpful resources available on campus and an important part of the college experience is learning how to ask for help. Asking for support sooner rather than later is often helpful.

If you or anyone you know experiences any academic stress, difficult life events, or feelings like anxiety or depression, we strongly encourage you to seek support. <http://www.cmhc.utexas.edu/individualcounseling.html>

*Student Emergency Services*:<http://deanofstudents.utexas.edu/emergency/>

**Important Safety Information**:

If you have concerns about the safety or behavior of fellow students, TAs, or Professors, call BCAL(the Behavior Concerns Advice Line):  512-232-5050. Your call can be anonymous.

*Title IX Reporting*

Beginning January 1, 2020, Texas Senate Bill 212 requires all employees of Texas universities, including faculty, report any information to the Title IX Office regarding sexual harassment, sexual assault, dating violence and stalking that is disclosed to them. Texas law requires that all employees who witness or receive any information of this type (including, but not limited to, writing assignments, class discussions, or one-on-one conversations) must be reported. If you would like to speak with someone who can provide support or remedies without making an official report to the university, please email advocate@austin.utexas.edu. For more information about reporting options and resources, visithttp://www.titleix.utexas.edu/, contact the Title IX Office via email at titleix@austin.utexas.edu, or call 512-471-0419.

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 unless you have my explicit, written permission. Unauthorized sharing of materials promotes cheating. It is a violation of the University’s Student Honor Code and an act of academic dishonesty. I am 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 Student Conduct and Academic Integrity in the Office of the Dean of Students. These reports can result in sanctions, including failure in the course.

Class Recordings:

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.