**INF 382 C Understanding Users** 27180

Fall 2019 Wed 12-3pm

Instructor: Andrew Dillon

**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 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 deep 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 explore methods that will guide our 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 interpreted 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.

**What will I learn?**

Main skills and attitudes to be developed:

* Origins and real  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 graduates, no matter their area of interest,  will find ways of making this material relevant to their professional 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 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.

**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 leaning -- you must engage with the class fully to benefit and gain a real understanding of user-centredness.*

**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 10 distinct entries.  This deliverable gives you room to explore user concerns in whatever form makes most sense for you.

2.    **Research paper**(Understanding role and literature of user-centeredness experiences)

50% of grade.  Compose and present to the class a term paper (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 6th 2019 at NOON. You may of course submit earlier but not later. *There is no late work accepted.*

**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 have intentionally left one class 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** | **8/28** | **Intro and class overview** | Vicente, K (2004) *The Human Factor*, chapter 2 |
| **2** | **9/4** | **Design: science or art?** | Harrison, S. et al (2007) The three paradigms of HCI.Cross, N (2011) Design Ability Bryan Lawson (2005) *How Designers Think,*chapters 1-3Iavari and Iavari (2006) Varieties of user-centeredness |
| **3** | **9/11** |  **History of user-centered design** | Ritter et al (2014)  User-centered design, a brief history.Vardouli, T. (2016) User design: constructions of the user |
| **4** | **9/18** |  **Human information processing 1**Cognitive Architecture | Jeff Johnson: *Designing with the Mind in Mind*: chapters 1-5 |
| **5** | **9/25** |  **Human Information processing 2**Learning, skills, and performance | Jeff Johnson: *Designing with the Mind in Mind:*chapters 6-10 |
| **6** | **10/2** |  **Human information processing 3**Individual differences | Jeff Johnson: *Designing with the Mind in Mind:*chapters 11-14 |
| 7 | **10/9** |  **Socio-technical models of use**Users in organizational contexts | Baxter and Sommerville (2011) Socio Technical Systems Lai (2017) Literature review of technology adoption modelsGirardi and Chiagouris (2018) The digital marketplace |
| 8 | **10/16** |  **Cultural dynamics**How the world of users varies | Hofstede, G. (2011) Dimensionalizing CulturesVenaik and Brewer (2016) National Culture Dimensions: the perpetuation of cultural ignorance  |
| 9 | **10/23** |   **User eXperience:  Usability, Hedonics, & Acceptance**   | Alexandre et al (2018) Acceptance and Acceptability CriteriaBevan 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** | **10/30** | **Inspection methods for evaluating designs** | Mahatody et al (2010) State of the Art on Cognitive Walkthrough |
| 11 | **11/06** | **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 FutureNessler D. (2017) [How to nail user interviews (Links to an external site.)](https://uxdesign.cc/how-to-nail-a-user-interviews-in-a-ux-hcd-or-design-thinking-process-full-guide-17d4eeee8dc3%22%20%5Ct%20%22_blank)Ross,J (2018) [The role of observation in user research (Links to an external site.)](https://www.uxmatters.com/mt/archives/2018/09/the-role-of-observation-in-user-research.php%22%20%5Ct%20%22_blank).  |
| **12** | **11/13** |   **Basic analysis of data from user studies**   | Suaro J. and Lewis (2016), A Crash Course in Statistics |
| **13** | **11/20** |  **Class presentations** | Students will present their research paper for Q&A |
| **14** | **11/27** | **Thanksgiving Holiday -** | No class meeting |
| 15 | **12/4** | **Class presentations** | 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.

**Late work**

As both major deliverables are due at the end of the semester,  there is no late work. You can of course be early!

**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 you should determine this in advance with your advisor who can recommend alternatives.