

# UT-Austin iSchool Syllabus I320U Information and Interaction Design Fall 2023

2023-08-12

## Description

This course focuses on the unique design practice of (1) representing and organizing information to facilitate perception and understanding (information architecture) and (2) specifying the appropriate mechanisms for accessing and manipulating task and play information (interaction design). This course also explores design patterns appropriate for the UX professional.

## Details

Important note: The information presented in this syllabus is subject to expansion, contraction, change, or stasis during the semester. In case of conflict between versions, the copy on Canvas takes precedence.

## Course Number

28390

## Prerequisites

- I301 Intro to Informatics
- I310U Intro to UX Design

## Time

MW 1230–1400

**Place**

PMA 5.124

**Dates**

August 21–December 4, 2023

**Final Exam**

Take-home, due at our official exam time

**Instructor**

Mick McQuaid

**Email**

mcq@utexas.edu

**Office**

1616 Guadalupe St, Room 5.402

**Office Hours**

MW 1415–1515, iSchool - West Mall Location, Flawn Academic Center 2304 Whitis Ave, Suite 18 or by appointment at my UTA office

**Academic Assistant**

Samarth Nayyar

**Academic Assistant Email**

samarthnayyar@utexas.edu

## Objectives - skills

- Identify complementary skills and congruent domains among potential project group partners.
- Conduct iterative design, including design, prototyping, and evaluation.
- Conduct a contextual inquiry.
- Construct personas suggested by a contextual inquiry.
- Construct a low fidelity prototype using pencil and paper.
- Construct a high fidelity prototype using tools of your own choosing.
- Evaluate a high fidelity prototype using heuristic evaluation or methods of your own choosing.
- Sketch designs quickly and with facility.
- Solve generic design problems quickly in an ad hoc group, mastering both the divergent and convergent activities required.
- Tell the story of a design problem and solution through a series of sketches.
- Contribute to a project group over the course of a semester and overcome project group problems.
- Create a project group website that communicates the substance of your semester-long project.
- Work with a client whose constraints are not under your control.

## Objectives - concepts

- Understand the role of constraints in design.
- Understand affordances.
- Understand the history of and basic definitions common in interaction design.
- Understand theories in human computer interaction such as Fitts's Law and Hick's Law and the characteristics of theories.
- Understand interaction paradigms.
- Understand four common interaction styles and the characteristics favoring their use.
- Understand two different ways to elicit and interpret verbal information from users of a system, protocol analysis and verbal analysis.
- Understand the role of collaboration among users in interaction design.
- Understand several ways to measure quality of service.
- Understand the role of emotion in interaction design.
- Understand relevant characteristics of a range of interaction devices.
- Understand software documentation and the phenomena taking its place.

## **Materials**

### **Textbook**

We will rely on portions of four books: Cooper et al. (2014), Dodson (2006), Holtzblatt, Wendell, and Wood (2005), and Rosenfeld, Morville, and Arango (2015). I am apparently allowed to put three chapters of any book on Canvas, and I have done so with these books. In addition, some of them are available for free at the library.

The study guide (on Canvas) is the only other required textbook for the course.

### **Notebook**

You should bring a paper notebook to class every day and be prepared to upload pictures from it frequently. The notebook should be the size of the Moleskine Cahier notebook,  $5 \times 8.25$  inches. It is widely available in packs of three for about 15USD. Substitute any sketchbook of similar size, e.g., Malvern Books has Leuchturn sketchbooks, which have higher quality paper than Moleskine but are more expensive. Why do I insist on this size? You actually draw differently on larger notebooks due to the average shape and size of the human hand.

You should only write or draw in the notebook and not staple or paste scans or photos into it. All the work in the notebook should be in pen or pencil, preferably pencil.

### **Phone or tablet with camera**

You should bring a phone or tablet or some device with a camera to class and be prepared to photograph your work to share it with the class.

### **Technology**

Except for Framer, specific software packages will not be taught in this course. Students should use judgment to select and use helpful software and should share their experiences with different software packages during discussion. Different students have different software needs. It makes sense to try a lot of different software packages to keep you open-minded but to polish your skills with a few to help you meet tight deadlines.

## Schedule

The estimated course schedule follows. All dates, lecture topics, and assignments are subject to reasonable change at the discretion of your instructor. Any changes will be announced in class.

## Schedule

Week 1 (21 Aug, 23 Aug) Introduction, Team options — Design thinking exercise

Week 2 (28 Aug, 30 Aug) Background radiation — Exercise 1, 05 points (drawing a face + 2 examples of good design)

Week 3 (6 Sep) (Note that Monday is Labor Day) — Audience — Milestone 1, 05 points (proj focus)

Week 4 (11 Sep, 13 Sep) Contextual Inquiry — Exercise 2, 05 points (picking up a key + 2 examples of good design)

Week 5 (18 Sep, 20 Sep) Personas — No graded work due

Week 6 (25 Sep, 27 Sep) Scenarios — Milestone 2, 10 points (contextual inquiry)

Week 7 (2 Oct, 4 Oct) Prototyping — Exercise 3, 05 points (widget redesign + 2 examples of good design)

Week 8 (9 Oct, 11 Oct) Personal Information — Milestone 3, 05 points (personas)

Week 9 (16 Oct, 18 Oct) Information — Exercise 4, 05 points (record interaction + 2 examples of good design)

Week 10 (23 Oct, 25 Oct) Information design patterns — Milestone 4, 05 points (scenarios)

Week 11 (30 Oct, 1 Nov) Finding information — Exercise 5, 05 points (ambient notification + 2 examples of good design)

Week 12 (6 Nov, 8 Nov) Navigating information — Exercise 6, 05 points (corporate directory + 2 examples of good design)

Week 13 (13 Nov, 15 Nov) Visualization — Exercise 7, 05 points (captions + 2 examples of good design)

Fall Break!

Week 14 (27 Nov, 29 Nov) Visual design theories — Milestone 5 10 points (prototype)

Week 15 (4 Dec) Summary — Exercise 8, 05 points (elevator + 2 examples of good design); Peer eval, project grades; Final exam, 15 points

Attendance, 10 points (your fraction of attendance is your attendance grade, for example, if you attend 85 percent of the classes, you'll get 8.5 out of 10 points)

## Grading

I plan to grade assignments within two weeks of their due date except where circumstances interfere. The grading scale used along with the grade components follow.

- A  $\geq 94.0\%$
- A-  $\geq 90.0\%$  &  $< 94\%$
- B+  $\geq 87.0\%$  &  $< 90\%$
- B  $\geq 83.0\%$  &  $< 87\%$
- B-  $\geq 80.0\%$  &  $< 83\%$
- C+  $\geq 77.0\%$  &  $< 80.0\%$
- C  $\geq 73.0\%$  &  $< 77.0\%$
- C-  $\geq 70.0\%$  &  $< 73.0\%$
- D  $\geq 60.0\%$  &  $< 70.0\%$
- F  $< 60.0\%$

## Attendance

I will take attendance every day and your percentage of attendance will count for ten percent of your grade.

If you have a legitimate need for absence, such as illness or job interview, notify the instructor by email as soon as possible and you may receive an excused absence.

## Lectures Online

This class is using the Lectures Online recording system. This system records the audio and video material presented in class for you to review after class. Links for the recordings will appear in the Lectures Online tab on the Canvas page for this class. You will find this tab along the left side navigation in Canvas.

To review a recording, simply click on the Lectures Online navigation tab and follow the instructions presented to you on the page. You can learn more about how to use the Lectures Online system at <https://sites.la.utexas.edu/lecturesonline/students/how-to-access-recordings/>.

You can find additional information about Lectures Online at: <https://sites.la.utexas.edu/lecturesonline/>.

# **POLICIES**

## **Disability and Access**

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 and Access (D&A). Please refer to D&A's website for contact and more information: <http://diversity.utexas.edu/disability/>. 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.

## **Policy on Academic Integrity**

Students who violate University rules on academic misconduct are subject to the student conduct process and potential disciplinary action. 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 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>.

## **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.

## **Artificial intelligence**

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.

## **Personal Pronouns**

Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with differences of race, culture, religion, politics, sexual orientation, gender identity & expression, and nationalities. 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, which you can do so here: [https://utdirect.utexas.edu/apps/ais/chosen\\_name/](https://utdirect.utexas.edu/apps/ais/chosen_name/). I will gladly honor your request to address you by a name that is different from what appears on the official roster, and by the pronouns you use (she/he/they/ze, etc). Please advise me of any changes early in the semester so that I may make appropriate updates to my records. For instructions on how to add your pronouns to Canvas, visit <https://utexas.instructure.com/courses/633028/pages/profile-pronouns>. More resources available on the Gender and Sexuality Center's website, <https://www.utgsc.org>.

## **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.

## **Mental Health Information**

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.

## **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 review the [university policy regarding campus carry](#).



- 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.

## **LGBTQIA+ Community**

As an institution committed to creating a safe and inclusive learning environment, The University of Texas at Austin strictly prohibits discrimination, harassment, or marginalization based on sexual orientation or gender identity under Title IX. If you encounter any discrimination or harassment, please seek support from the Title IX office.

Additionally, we encourage you to complete the Campus Climate Survey by following the link: <https://app.smartsheet.com/b/form/d70ce9db84a3403ab00394e4617f8f3b>

If you experience any form of discrimination or harassment, please contact the Title IX office for support. If you do not wish to contact the UT Title IX office, you may view confidential community resources at <https://titleix.utexas.edu/community-resources-confidential> . The Gender and Sexuality Center, found at <https://diversity.utexas.edu/genderandsexuality/> , offers resources and support for LGBTQIA+ students, and I encourage you to visit their website for more information or to contact the professional staff at <https://diversity.utexas.edu/genderandsexuality/contact/> . Lastly, the GSC offers a handy website to view GSC student group affiliates at <https://diversity.utexas.edu/genderandsexuality/student-groups/>.

I am committed to creating a safe and inclusive learning environment for all students. This includes fostering an environment of respect, openness, and understanding in the classroom and actively working to address any discrimination or harassment that may occur. If you wish to display your pronouns on your Canvas page, you can find a guide here: <https://utexas.instructure.com/courses/633028/pages/profile-pronouns>. Furthermore, you can include a “preferred name” by viewing the following link to class rosters, which come with the student’s legal name (unless an addition of a preferred name is made): [https://utdirect.utexas.edu/apps/ais/chosen\\_name/](https://utdirect.utexas.edu/apps/ais/chosen_name/).

## 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 Title IX Office 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 mandatory reporters under federal Title IX regulations and are required to report a wide range of behaviors we refer to as sexual misconduct, 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: [supportandresources@austin.utexas.edu](mailto:supportandresources@austin.utexas.edu). 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: <https://titleix.utexas.edu>, contact the Title IX Office via email at: [titleix@austin.utexas.edu](mailto:titleix@austin.utexas.edu), or call 512-471-0419.

## References

- Cooper, Alan, Robert Reimann, David Cronin, and Christopher Noessel. 2014. *About Face 4.0: The Essentials of Interaction Design*. Indianapolis, IN: Wiley.
- Dodson, Bert. 2006. *Keys to Drawing with Imagination*. Cincinnati, OH: North Light.
- Holtzblatt, Karen, Jessamyn Burns Wendell, and Shelley Wood. 2005. *Rapid Contextual Design: A How-to Guide to Key Techniques for User-Centered Design*. San Francisco, CA: Morgan Kaufmann.
- Rosenfeld, Louis, Peter Morville, and Jorge Arango. 2015. *Information Architecture: For the Web and Beyond*. 4th ed. Sebastopol, CA: O'Reilly Media.