

# UT-Austin iSchool Syllabus INF385T UX Prototyping Spring 2023

1/3/23

## Description

This course covers the prototyping aspect of the iterative design cycle, which also includes a design aspect and an evaluation aspect. Prototyping includes both lofi and hifi prototypes, distinguished from each other by both their purpose and form. The lofi prototype proposes design ideas to be questioned, while the hifi prototype proposes design answers to those questions. Students will produce both types of prototypes using both pencil and paper, as well as contemporary software tools. To the extent that it supports prototyping, students will also engage in the design and evaluation aspects of the iterative design cycle.

## 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

28460

## Prerequisites

graduate standing

**Time**

W 1500–1800

**Place**

UTA-1.208

**Dates**

09 JAN 2023–24 APR 2023

**Final Exam**

Take-home reflection, due date to be announced

**Instructor**

Mick McQuaid

**Email**

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**Office**

1616 Guadalupe St, Room 5.402

**Office Hours**

TUE 1430–1630, WED 1300–1500 or by appointment

## Materials

No single textbook will suffice for such a rapidly changing subject. Instead, many sources must be consulted with the guidance of the instructor. These include Baker (2017), Buxton (2007), Cockton et al. (2016), Cooper et al. (2014), Goodman, Kuniavsky, and Moed (2012), Holtzblatt, Wendell, and Wood (2005), Holtzblatt and Beyer (2016), Lazar, Feng, and Hochheiser (2017), Matsudaira (2019), Patton (2014), Rubin and Chisnell (2008), Shneiderman (2017), Spiekermann (2014), and Wixon (2003). Students will need to make extensive use of Google and Wikipedia, as well as popular design websites such as A List Apart, Behance, and dribbble, in addition to readings provided on Canvas.

## Learning Outcomes

The student successfully completing this class will:

- learn multiple techniques for creating lofi and hifi prototypes using pencil and paper and contemporary software tools
- have experience implementing multiple lofi prototypes as individuals
- have experience implementing multiple hifi prototypes as a group and one as individuals
- be able to articulately describe and evaluate tools and techniques for creating lofi and hifi prototypes

## Class Format

This is a hands-on, project focused course, so attendance and participation in class are critical to individual success in this course and to the success of the course. You need to come to class prepared to participate in small group and full class discussions and project work, to complete all required readings prior to class, and to submit assignments on time.

## Schedule

Week 1 (11 Jan) Design Thinking Exercise — Introductions — Syllabus — Canvas — Design Principles — Milestone 1 (accessible prototype) assigned

Week 2 (18 Jan) Accessibility — Sketches 1, due Friday at midnight

Week 3 (25 Jan) Mood boards — Design Inspiration — Sketching — Crazy Eights — Milestone 1 (accessibility) due on Monday at 9PM — Milestone 2 (using inspiration) assigned

Week 4 (1 Feb) Story Mapping — Patton (2014) — Scenarios — Sketches 2, due Friday at midnight

Week 5 (8 Feb) How Might We (HMW) statements — Ideation — Diverging & Converging — Prototyping Levels — System diagramming — Becker (2020) (Ch 7) — Prototyping definitions — Buxton (2007) — Individual course project assigned — Milestone 2 (using inspiration) due on Monday at 9PM — Milestone 3 (using story mapping) assigned

Week 6 (15 Feb) Prototyping elements — Color — Typography — Layout — Animation — Sketches 3, due Friday at midnight

Week 7 (22 Feb) Agile Development — Milestone 3 (using story mapping) due on Monday at 9PM — Milestone 4 (aesthetics) assigned

Week 8 (1 Mar) Working with clients — Greever (2020) — Sketches 4, due Friday at midnight

Week 9 (8 Mar) Micro interactions — Bad UX and UX writing— Milestone 4 (aesthetics) due on Monday at 9PM — Milestone 5 (microinteractions) assigned

Week 10 (15 Mar) Spring Break

Week 11 (22 Mar) Formative & Summative Testing — Sketches 5, due Friday at midnight

Week 12 (29 Mar) Heuristic Evaluation — Affinity Mapping — Team work — Milestone 5 (microinteractions) due on Monday at 9PM — Milestone 6 (testing) assigned

Week 13 (5 Apr) User Testing dot Com — Fuel Cycle — Empty States — Sketches 6, due Friday at midnight

Week 14 (12 Apr) Leading a prototyping workshop — Robert Stackowiak (2020) Chapter 2 — Milestone 6 (testing) due on Monday at 9PM Milestone 7 (improvements from tests) assigned

Week 15 (19 Apr) Summary / Presentations / Feedback

Week 16 (26 Apr) Finals week — Milestone 7 (improvements from tests) due on Monday at 9PM — Final exam “Reflections” due on official exam date (to be announced)

## 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  $< 60.0\%$

### **Milestones (35%)**

You will complete seven milestones as a group of five.

Details are in the `hwInstructions.html` document.

### **Sketches (Lofi Prototypes) (30%)**

You will keep a 5×8 inch (approximately) sketchbook throughout the semester. This may be a Moleskine Cahier or similarly sized sketchbook. The size is important.

You will submit pictures of sketches from that sketchbook, a total of 18 sketches in six groups of three.

Details are in the `hwInstructions.html` document.

### **Final Exam - Reflection (25%)**

The final exam will be a take-home reflection document.

Details are in the `hwInstructions.html` document.

### **Peer Review (10%)**

Each group member will rate their peers on a scale of 0-10. Your peers' scores for you will be averaged and entered on the grade sheet as a numerical score.

## **Attendance**

I will take attendance every day and your final grade for the class will be dropped one-half letter grade if you are only present for 70 to 80 percent of classes. It will be dropped a full letter grade if you are only present for 60 to 70 percent of classes. If you are present less than 60 percent of the classes, your final grade will be dropped by two letter grades and it will be difficult for you to achieve a passing grade so, in that case, you should drop the class.

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.

## **POLICIES**

### **Accessible, Inclusive, and Compliant Statement**

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.

## **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**

I urge students who are struggling for any reason and who believe that it might impact their performance in the course to reach out to me if they feel comfortable. This will allow me to provide any resources or accommodations that I 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 512-232-2983. Outside CMHC business hours (8am-5pm, Monday-Friday), contact the CMHC 24/7 Crisis Line at 512-471-2255.

## References

- Baker, Rebecca. 2017. *Agile UX Storytelling: Crafting Stories for Better Software Development*. New York, NY: Apress. <https://doi.org/10.1007/978-1-4842-2997-2>.
- Becker, Christopher Reid. 2020. *Learn Human-Computer Interaction: Solve Human Problems and Focus on Rapid Prototyping and Validating Solutions Through User Testing*. Packt Publishing.
- Buxton, Bill. 2007. *Sketching User Experiences: Getting the Design Right and the Right Design*. San Francisco: Morgan Kaufman.
- Cockton, Gilbert, Marta Lárusdóttir, Peggy Gregory, and Åsa Cajander. 2016. *Integrating User-Centred Design in Agile Development*. Cham, Switzerland: Springer.
- Cooper, Alan, Robert Reimann, David Cronin, and Christopher Noessel. 2014. *About Face 4.0: The Essentials of Interaction Design*. Indianapolis, IN: Wiley.
- Goodman, Elizabeth, Mike Kuniavsky, and Andrea Moed. 2012. *Observing the User Experience: A Practitioner's Guide to User Research*. Waltham, MA: Morgan Kaufman.
- Greever, Tom. 2020. *Articulating Design Decisions: Communicate with Stakeholders, Keep Your Sanity, and Deliver the Best User Experience*. 2nd ed. O'Reilly Media.
- Holtzblatt, Karen, and Hugh Beyer. 2016. *Contextual Design, Second Edition: Design for Life*. San Francisco, CA: Morgan Kaufmann.
- 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.
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- Matsudaira, Kate. 2019. "Design Patterns for Managing Up." *Commun. ACM* 62 (3): 43–45. <https://doi.org/10.1145/3303878>.
- Patton, Jeff. 2014. *User Story Mapping*. Sebastopol, CA: O'Reilly Media.
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- Shneiderman, Ben. 2017. "Revisiting the Astonishing Growth of Human-Computer Interaction Research." *Computer*, no. 10: 8–11.
- Spiekermann, Erik. 2014. *Stop Stealing Sheep, 3rd Edition*. San Jose, CA: Adobe Press.
- Wixon, Dennis. 2003. "Evaluating Usability Methods: Why the Current Literature Fails the Practitioner." *Interactions* 10 (4): 28–34. <https://doi.org/10.1145/838830.838870>.