

UT-AUSTIN ISCHOOL SYLLABUS
INF385T RAPID PROTOTYPING & LEAN UX METHODOLOGY
FALL 2022 DRAFT OF APRIL 3, 2022

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. 28555

Prerequisites. ISTE-262

Time. TH 1530-1830

Place. UTA-I.208

Dates. 22 AUG 2022-5 DEC 2022

Final Exam. TBA

Instructor. Mick McQuaid

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Office. TBA

Office Hours. TBA

DESCRIPTION

With the success of software delivery methods such as Agile, design teams have had to adapt how they work within software delivery teams as the traditional design cycles are not well suited for rapid iteration. With the popularity over the last few years around Lean UX continuing to build as well as other variations (Design Sprints, Rapid Customer Feedback, MVP, etc.) it is advantageous for designers to get up-to-speed on these methodologies to further enable their skillsets.

The class will cover three major areas:

1. introduction to basic design concepts such as composition, color theory, interactions
2. the Lean UX methodology, history, predecessor, pros/cons, and adaptations on Lean UX and case studies from companies such as Google
3. the application of rapid prototyping using the latest design tools and methods

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 Buxton (2007), 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), 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:

- understand the benefits, drawback, history, and application of lean methodologies
- have experience implementing multiple projects using the techniques learned
- gain real-world experience with outside 'clients' to help build their confidence and portfolio with actual industry experience

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.

Prior to most class meetings, you will submit a weekly design challenge in Canvas based on that week's topic. We will start each class with a group critique of the designs for that week pulling from your submissions.

This semester will focus on one project for the semester that will result in a complete portfolio piece.

SCHEDULE

Week 1 (25 Aug)

Design Thinking Exercise — Introductions — Syllabus — Canvas — Design Principles — Figma — Design Challenge 1

Week 2 (1 Sep)

Mood boards — Design Inspiration — Story Mapping — Scenarios — Design Challenge 2 — Story Map for Design Challenge 2

Week 3 (8 Sep)

Present Story Map for Design Challenge 2 — Sketching — Crazy Eights — Design Challenge 3

Week 4 (15 Sep)

Working with clients — Greever (2020) — Design Challenge 4

Week 5 (22 Sep)

Agile Development — Prototyping definitions — Buxton (2007) — Design Challenge 5

Week 6 (29 Sep)

Prototyping elements — Color — Typography — Layout
— Animation — Design Challenge 6

Week 7 (6 Oct)

How Might We (HMW) statements — Ideation — Diverging and Converging — Prototyping Levels — System diagramming — Becker (2020) (Chapter 7) — Design Challenge 7

Week 8 (13 Oct)

Accessibility — Design Challenge 8

Week 9 (20 Oct)

Leading a prototyping workshop — Robert Stackowiak (2020) Chapter 2 — Design Challenge 9

Week 10 (27 Oct)

Formative and Summative Testing — Design Challenge 10

Week 11 (3 Nov)

User testing processes

Week 12 (10 Nov)

User testing tools — OBS — Mr Tappy — Eye trackers

Week 13 (17 Nov)

Summary — User testing report is due

Week 14 (24 Nov)

Thanksgiving Break

Week 15 (1 Dec)

Presentations

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 90.0%
- B \geq 80.0% & $<$ 90%

- C $\geq 70.0\%$ & $< 80.0\%$
- D $\geq 60.0\%$ & $< 70.0\%$
- F $< 60.0\%$

Class Attendance and Participation (20%). Your attendance and class participation grade will be calculated by multiplying the numerical assessment of your class participation by the percentage of classes that you attend (with exceptions made for documented, university recognized absences as noted above). Regular attendance and active participation in each class session are critical for receiving a good grade in this course. For example, if you actively participate in each class meeting, you will receive a full letter grade higher than if you were to skip half of the classes or to be half-awake for all of the classes.

Design Challenges (40%). Most weeks, you will submit a design challenge in Canvas.

Each of you will be assigned a week where you will come up with the design challenge for that week and present the design problem to the class. You should draw on problems you experienced during your internships, at work, or an issue you've seen in your daily interactions with artifacts in the world. Your problem should be concise enough that a couple concepts could be created in 4-5 hours and typically 2-3 screens. You will not be required to submit your own designs for the week where you are the creator of the challenge.

Your weekly design challenges will be completed using the design tool of your choosing. Typically this will be Sketch or Figma, but some of you that are more advanced may choose a different tool (Torch, Proto.io, or FramerX). To receive full credit, your weekly submission must be a minimum of two concept designs that address the main problem presented as well as a brief (1-2 paragraph) explanation of how your concept is a viable solution. Your concepts are due by Monday by

gam via Canvas and should be an exported PDF containing your concepts and explanation in a concise presentation.

That week's 'student organizer' will then review the submissions and come to class prepared to present a ranked top 5 list that they find the most compelling (for whatever reason they choose).

I'll keep score over the course of the semester and the person with the most top 5 appearances will get... something :)

Course Project (40%). The overall course project will be graded on the following:

60% - Ability to demonstrate knowledge of the topics covered throughout the course and how it was applied to your project
20% - Delivered on schedule
20% - Deliverable is of the quality expected in a corporate environment

POLICY ON ACADEMIC INTEGRITY

Students who violate University rules on academic dishonesty are subject to disciplinary penalties, including the possibility of failure in the course and/or dismissal from the University. Since such dishonesty harms the individual, all students, and the integrity of the University, policies on academic dishonesty will be strictly enforced. For further information, please visit the Student Conduct and Academic Integrity website at: <http://deanofstudents.utexas.edu/conduct>.

ACCOMMODATIONS

Any student with a documented disability (physical or cognitive) who requires academic accommodations should contact the Services for Students with Disabilities area of the Office of the Dean of Students at 471-6259 (voice) or 471-4641 (TTY for users who are deaf or hard of hearing) as soon as possible

to request an official letter outlining authorized accommodations.

RELIGIOUS HOLY DAYS

Religious holy days sometimes conflict with class and examination schedules. Sections 51.911 and 51.925 of the Texas Education Code address absences by students and instructors for religious holy days. Section 51.911 states that a student shall be excused from attending classes or other required activities, including examinations, for the observance of a religious holy day, including travel for that purpose. A student whose absence is excused under this subsection may not be penalized for that absence and shall be allowed to take an examination or complete an assignment from which the student is excused within a reasonable time after the absence.

University policy requires students to notify each of their instructors as far in advance of the absence as possible so that arrangements can be made.

INSTRUCTOR ABSENCE

Section 51.925 prohibits the university from discriminating against or penalizing an instructor who is absent from class for the observance of a religious holy day. Proper notice must be given to the department chair. Prior to the begin of classes each semester, the instructor must provide the department chair a list of classes that will be missed due to observance of a religious holy day. The list must be personally delivered, acknowledged and dated by the chair, or sent via certified mail, return receipt requested.

Consistent with regular university policy, the instructor is responsible for finding a qualified substitute UT Austin instructor for any missed class(es).

REFERENCES

- 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.
- 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.
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- Lazar, Jonathan, Jinjuan Heidi Feng, and Harry Hochheiser. 2017. *Research Methods in Human-Computer Interaction, 2nd Ed*. West Sussex, UK: Wiley.
- Matsudaira, Kate. 2019. "Design Patterns for Managing Up." *Commun. ACM* 62 (3): 43–45. <https://doi.org/10.1145/3303878>.
- Robert Stackowiak, Tracey Kelly. 2020. *Design Thinking in Software and AI Projects: Proving Ideas Through Rapid Pro-*

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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>.