App Prototyping Studio

UT-Austin iSchool Syllabus
Fall 2026

2026-09-03

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Description

This course is offered jointly with the Computer Science department. The iSchool students in this class learn to design lofi and hifi prototypes using pencil, paper, and software such as Figma, while the Computer Science students learn to develop those designs into working iOS applications using Xcode. The primary focus of the course is the cooperation of designers and developers to create working, usable software. No software development is required of the iSchool students. Figma experience is preferred.

We begin each class session together in one room and then split into two groups, designers and developers, using adjoining rooms. Several sessions each semester are spent entirely together, working in mixed teams.

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

30519

Canvas

https://utexas.instructure.com/courses/1456631

Prerequisites

Upper-division standing and Informatics 310U (Information and Interaction Design) or equivalent

Time

Tu, Th 1100–1230

Place

GAR 2.128 (the developers meet in PMA 5.112 except when we meet together, which is in GAR 2.128)

Dates

August 24–December 07, 2026

Final Exam

Thursday, December 10, 1–3PM GAR 2.128

Instructor

Mick McQuaid

Email

`mcq@utexas.edu`

Office

1616 Guadalupe St, Room 5.402

Office Hours

By appointment in my office or on Zoom at https://utexas.zoom.us/my/mickmcquaid

Instructor (Computer Science section)

William Bulko, `bulkowc@eid.utexas.edu`, GDC 6.402

Schedule grid (Computer Science section)

CS 378

Materials

No single textbook will suffice for such a rapidly changing subject. Instead, many sources must be consulted with the guidance of the instructor. The readings assigned in the schedule below are Cockton et al. (2016), Becker (2020), Buxton (2007), Saffer (2013), Greever (2020), Nielsen (1994), and Norman (2013). Further useful sources include Baker (2017), Cooper et al. (2014), Goodman et al. (2012), Patton (2014), Rubin and Chisnell (2008), 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.

You will need a Figma account (free with your UT EID) and a 5×8 inch (approximately) sketchbook. This may be a Moleskine Cahier or similarly sized sketchbook. The size is important—8.5×11 inches is too big.

Learning Outcomes

The student successfully completing this class will be able to:

- create lofi and hifi prototypes using pencil and paper and contemporary software tools;
- communicate a design to developers clearly enough that they can build it;
- work with a client to elicit and negotiate requirements;
- conduct formative and summative user testing of a prototype and act on the results;
- recognize and correct bad UX;
- articulately describe and evaluate tools and techniques for prototyping;
- work effectively on a mixed team of designers and developers over the course of a semester-long project.

Class Format

This is a hands-on, project-focused studio course, so attendance and participation are critical to your individual success and to the success of the course. Most sessions are built around an exercise rather than a lecture. 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.

You will be assigned to a team with Computer Science students. You design; they develop. Neither group can succeed alone, which is the point of the course.

Unexcused absences or inadequate levels of participation during in-class exercises may affect your final grade in the course.

Schedule

The schedule below is the designers' schedule. On days marked *together*, we meet with the developers for the whole session.

Week 1 (24 Aug) **Tu:** Design Thinking Exercise — Syllabus — **Th:** Onboarding Workflow Exercise — **Assigned:** (Th) onboarding lofi

Week 2 (31 Aug) **Tu:** Team Building Exercise (together) — **Th:** Discussion of onboarding and team building — **Assigned:** (Tu) project proposal (everyone) — **Due:** (Th) onboarding lofi

Week 3 (07 Sep) (Labor Day) — **Tu:** Teaching Design for Developers in Groups — **Th:** Contextual Inquiry Exercise (together) — **Before class:** Read Cockton et al. (2016), ch 3 — **Assigned:** (Tu) user testing lofi sketches

Week 4 (14 Sep) **Tu:** Teaching Design for Developers in Groups — **Th:** User Testing (together) — **Assigned:** (Tu) onboarding workflow (everyone) — **Due:** (Tu) project proposal (everyone) — (Th) onboarding workflow (everyone)

Week 5 (21 Sep) **Tu:** Storymapping Exercise (together) — **Th:** Guest speaker: Hanna Melo Fugulin, American Foundation for the Blind — Prototyping elements: color, typography, layout, animation — **Before class:** Read Becker (2020) (Ch 7), Buxton (2007) — **Assigned:** (Tu) sketch 1 + 2 examples of good design — **Due:** (Th) user testing lofi sketches

Week 6 (28 Sep) **Tu:** Guest Speaker: Daniel Pogue, ExxonMobil — Mood Board Exercise (together) — **Th:** Mood boards in FigJam — **Assigned:** (Tu) sketch 2 + 2 examples of good design — **Due:** (Tu) sketch 1 + 2 examples of good design

Week 7 (05 Oct) **Tu:** Microinteraction Exercise (together) — **Th:** Microinteractions in Figma — **Before class:** Read Saffer (2013), ch 1 — **Assigned:** (Th) user testing alpha — **Due:** (Th) sketch 2 + 2 examples of good design

Week 8 (12 Oct) **Tu:** Persona Exercise — **Th:** Mock Client Time Exercise (together) — **Before class:** Read Greever (2020) — **Assigned:** (Tu) sketch 3 + 2 examples of good design — **Due:** (Th) user testing alpha

Week 9 (19 Oct) **Tu:** Formative testing — **Th:** Summative testing — **Assigned:** (Tu) user testing beta — **Due:** (Tu) sketch 3 + 2 examples of good design

Week 10 (26 Oct) **Tu:** Heuristic Evaluation (together) — **Th:** Culture discussion — **Before class:** Read Nielsen (1994) — Read Norman (2013), ch 1 (pp 1–36) — **Assigned:** (Tu) bad ux — **Due:** (Th) user testing beta

Week 11 (02 Nov) **Tu, Th:** Bad UX (together) — **Assigned:** (Tu) sketch 4 + 2 examples of good design — **Due:** (Tu) bad ux

Week 12 (09 Nov) **Tu, Th:** Vibe Coding Exercise (together) — **Assigned:** (Tu) sketch 5 + 2 examples of good design — **Due:** (Tu) sketch 4 + 2 examples of good design

Week 13 (16 Nov) **Tu, Th:** Presentations (together) — **Assigned:** (Th) sketch 6 + 2 examples of good design — **Due:** (Th) sketch 5 + 2 examples of good design

Fall Break

Week 14 (30 Nov) **Tu, Th:** Presentations (together) — **Due:** (Th) sketch 6 + 2 examples of good design

Week 15 (07 Dec) Last class day is Monday — **Due:** final reflection, at our final exam time

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.

Table 1: Scores are not rounded

letter grade		lower bound			upper bound
A	>=	94.0%			
A-	>=	90.0%	&	<	94%
B+	>=	87.0%	&	<	90%
B	>=	83.0%	&	<	87%
B-	>=	80.0%	&	<	83%
C+	>=	77.0%	&	<	80%
C	>=	73.0%	&	<	77%
C-	>=	70.0%	&	<	73%
D	>=	60.0%	&	<	70%
F				<	60%

Sketches (lofi prototypes), 30%

You will keep a sketchbook throughout the semester and submit pictures of sketches from it in six batches. Each batch is one sketch plus two examples of good design you found in the world, with a sentence or two on why each example is good. Each batch is worth 5%.

Project deliverables, 15%

You design an iOS application that your team's Computer Science students build. The deliverables you own are

- onboarding lofi, 5%
- project proposal (with your team), 5%
- onboarding workflow (with your team), 5%

User testing, 15%

You test three times, once on paper and twice on running software, and report each time.

- user testing of lofi sketches, 5%
- user testing of the alpha release, 5%
- user testing of the beta release, 5%

Bad UX, 5%

You find, document, and diagnose an instance of bad UX in the wild, then propose a fix. You will have read Norman (2013), ch 1, to give you a vocabulary to talk about it. You upload a picture of the bad UX before class day.

Final presentation, 15%

Your team presents the finished prototype and the app built from it, including a live demo, during the last two weeks of class.

Final reflection, 10%

A take-home reflection document, due at our final exam time.

Attendance, 10%

See the attendance policy below.

How I grade

You are working under conditions that vary from team to team, which is realistic and is not something I will try to equalize. I grade your response to the situation you were given, not your work against your classmates'. The emphasis in this class is on process, and your deliverables are graded from that perspective.

Grading has two parts, and they work differently on purpose.

Part one: the completeness check

First I check whether the submission is all there. Did you turn in every component the assignment asked for? Are the files named and formatted as specified, the figures labeled, the sources cited, the prose proofread?

This part is mechanical. I am not exercising judgment here, I am reading a list. Meeting these expectations earns you nothing, because they are the floor rather than the work. Missing them costs you. A submission that omits a required component, or that is careless enough that I have to work to figure out what you turned in, loses up to 10% of that assignment's points before I look at the substance at all. If a required component is missing entirely, I cannot assess it, and it is scored as missing.

Part two: the quality assessment

Everything else is judgment, and that is where most of your grade comes from. I am not going to give you a rubric.

That is deliberate. In the work you are preparing for, no one hands a designer a scoring sheet before a design review. Your work gets evaluated by experienced people, against the problem you claimed to be solving, in a conversation where you have to be able to hold your own. A rubric would invite you to optimize for the rubric, and rubric-optimal design work is a recognizable genre: it satisfies every stated requirement and helps nobody. I would rather grade the thing itself, and I would rather you spend the semester learning to make defensible choices than learning to fill boxes.

What I can tell you is what I am asking myself as I read. These are questions, not criteria. They are not weighted, not exhaustive, and not all of them apply to every assignment.

- Is the problem real, and did you show me that it is rather than assert it?
- Could a developer build this from what you handed them without guessing?
- Are your alternatives genuinely different approaches, or one idea in several guises?
- Did you choose among them for reasons, and are those reasons ones a colleague could argue with?
- Does the prototype let me see the idea, or does it hide it?
- Did your user testing have the capacity to tell you that you were wrong?
- Did you respond to what your client and your developers actually said, or route around them?
- Could a reader who was not in the room follow your reasoning from the problem to the decision?

The mark of strong work is that I learn something from reading it: I finish with a clearer view of the problem than I had at the start.

Judgment means the number is not a quantity you can reverse-engineer. That discomfort is part of the training. What discretion does not mean is that I grade on how hard you appear to have worked, on whether I share your taste, or on where your work falls in a ranking of the class.

Every assignment comes back with written comments that explain the judgment. The comments are the feedback. The number is a summary of them, and it is the less informative of the two.

Course policies

Attendance

I take attendance every day and attendance counts for one tenth of your total grade. This is a studio course built around in-class exercises with your teammates, so an absence costs you and your team the exercise, not just the points.

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

Working with your team

Project deliverables are a team effort. Since your teammates depend on you and you depend on them, feedback from teammates indicating that a member contributed little or nothing to a phase of the project may reduce that member's grade for that phase, and in extreme cases for previous phases retroactively.

POLICIES

For a list of important university policies and helpful resources that you may need as you engage with and navigate your courses and the university, see the University Policies and Resources for Students Canvas page. The page includes important safety information including the policy on carrying of handguns on campus, the language of the University Honor Code, Title IX legal requirements for Texas employees, and information about how to receive support through the office of Disability & Access, tutoring services, the Counseling and Mental Health Center, University Health Services, and other resources.

Important Note: The policies of the University are undergoing change. The following *may* be superseded by the policies at https://utexas.instructure.com/courses/1377522, which is a Canvas course containing the honor code which you *must* adhere to, as well as much of the following information. A better URL may be https://utexas.instructure.com/enroll/TP964H if for some reason you are not enrolled in the site.

Attendance

All concerns about attendance recording must be resolved within 72 hours of the class session in question. In other words, you can't come to the instructor weeks later and insist you were present on such-and-such a day.

Assignment Submission

All assignments must be submitted via Canvas. No assignment should be submitted via email. Any assignment submitted via email will receive a grade of zero. It may be tempting to try to submit assignments via email when you have trouble with Canvas but the correct response is to contact tech support and resolve the problem with Canvas.

Extra credit and grade rounding

There is no extra credit available in this class and grades are not rounded. You receive exactly the letter grade corresponding to the score you achieve.

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://community.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

HOP 2-9970 prohibits students from recording class instruction (audio or video) unless a student obtains the instructor's permission or Disability & Access has approved audio recording as an accommodation.

Official 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

In accordance with the University's Institutional Rules on Student Services and Activities, Chapter 11, students accept the responsibility to always uphold academic integrity and an honor code reflective of a scholarly community devoted to academic and personal success. All members of the University community are fully accountable and responsible for any output they produce as part of academic work. They are also responsible for following the guidance specified in the Texas Statement on Academic Integrity and avoiding prohibited uses of generative AI tools outlined in the Information Security Office's guidance on Acceptable Use of Generative AI Tools.

In this course, generative AI use is partially permitted.

Generative AI use is permitted for academic work in this course, provided that students 1) use AI responsibly, 2) practice discernment and conduct meaningful human review of any output generated by AI, and 3) properly disclose use according to the disclosure policies in this syllabus. Using generative AI tools without proper adherence to the disclosure policy in this course, even when AI use is permitted, may constitute academic misconduct under UT Austin's Institutional Rules and may be referred to Student Conduct and Academic Integrity in the Office of the Dean of Students for resolution.

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 permitted for take-home activities (except sketchbooks) but must be documented. Usually, you should include a lengthy disclaimer at the end of the assignment as a separate paragraph telling which generative AI tool was used, e.g., ChatGPT, and what it was used for. Failure to document will be considered a cheating offense, punishable under the rules for academic integrity. The disclaimer must be specific and thorough. A brief, vague statement will not be considered sufficient. ***The easiest way to comply with this requirement is to copy and paste your chat history as an appendix***. This includes both successful and unsuccessful prompts. I really mean your entire chat history here.

There may be certain cases where you are *not* permitted to use generative AI for in-class activities. These will be announced.

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/. 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 are available on the Women's Community Center website, https://community.utexas.edu/wcc/.

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. There's a short video of Bryce Moffett explaining what she does at https://ischool.utexas.edu/people/care-counselor

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.

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.

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/.

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. 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, or call 512-471-0419.

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