UT - AUSTIN ISCHOOL COURSE SYLLABUS
I320U INFORMATION AND INTERACTION DESIGN
FALL 2022 DRAFT OF SEPTEMBER 23, 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. 28279

Prerequisite.

- 301 Intro to Informatics
- 310 Intro to UX Design

Time. WF 10:30–12:00

Place. PAR306

Dates. 22 AUG–05 DEC

Final Exam. take home exam, due 11 DEC

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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.

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.

- 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, 5×8.25 inches. It is widely available in packs of three for about 15USD. Substitute any sketchbook of similar size, e.g., Malvern Books has Leuchturm 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. Numbers refer to weeks of the semester.

1. Intro, Team options

2. Background radiation
3. Audience
4. Contextual inquiry
5. Personas
6. Scenarios
7. Prototyping
8. Personal information
9. Information
10. Information design patterns
11. Finding information
12. Navigating information
13. Visualization
14. Visual design theories

GRADING

I intend to grade all assignments within two weeks except when circumstances interfere. The grading scale used along with the grade components follow. The list numbering refers to week numbers of the semester.

- A >= 90.0%
- B >= 80.0% & < 90%
- C >= 70.0% & < 80.0%
- D >= 60.0% & < 70.0%
- F < 60.0%

1. Design thinking exercise
2. Exercise 1, 05 points (drawing a face + 2 examples of good design)
3. Milestone 1, 05 points (proj focus)
4. Exercise 2, 05 points (picking up a key + 2 examples of good design)
5. No graded work due

6. Milestone 2, 10 points (contextual inquiry) delayed to week 7
7. Exercise 3, 05 points (widget redesign)
8. Milestone 3, 05 points (personas)
9. Exercise 4, 05 points (record interaction)
10. Milestone 4, 05 points (scenarios)
11. Exercise 5, 05 points (ambient notification + 2 examples of good design)
12. Exercise 6, 05 points (corporate directory + 2 examples of good design)
13. Exercise 7, 05 points (captions + 2 examples of good design)
14. Milestone 5 10 points (prototype)
15. Exercise 8, 05 points (elevator + 2 examples of good design); Peer eval, project grades; Final exam, 15 points

Adding the points from the above list shows that the course grade is composed of

- 35 points project milestones
- 15 points exam
- 40 points in-class exercises

Note that I will drop your grade by one letter grade if your attendance is poor. What do I mean by poor attendance? We don't know what emergencies may affect the entire class or a large part of it, so I will determine low attendance by examining outliers at the end of the semester. In other words, if your attendance is poor *in comparison to your peers*, expect to be downgraded by one letter grade.

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/`.

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.