UT - AUSTIN ISCHOOL COURSE SYLLABUS
I320U INFORMATION AND INTERACTION DESIGN

FALL 2022 DRAFT OF AUGUST 22, 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

Instructor. Mick McQuaid

Email. mcq@utexas.edu

Office. 1616 Guadalupe St, Room 5.402

Office Hours. 1300–1500 hrs, WED & FRI

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 HCI 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.

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 × 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 Figma, 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. Self-assessment
2. Exercise 1, 05 points (drawing a face)
3. Milestone 1, 05 points (proj focus)
4. Exercise 2, 05 points (picking up a key)
5. No graded work due
6. Milestone 2, 10 points (contextual inquiry)
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)
12. Exercise 6, 05 points (corporate directory)
13. Exercise 7, 05 points (captions)
14. Milestone 5 10 points (prototype)
15. Exercise 8, 05 points (elevator); 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

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/.

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).

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 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

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.